AN EXAMINATION OF EMPLOYEES' OBSERVATIONS AND INFORMAL INFORMATION IN A DISTRESSED ORGANISATION: THE CASE OF FORTEX GROUP LIMITED

A thesis

submitted in partial fulfilment

of the requirements for the Degree

of

MASTER OF COMMERCE

in Accountancy, Finance and Information Systems

in the University of Canterbury

by

SCOTT MYLREA TOBIN

University of Canterbury

1995

Table of Contents

List of Figures, Tables and Exhibits

Figures

Tables

Exhibits

Abstract

A review of previous qualitative corporate distress research reveals that non-managerial employees appear to have been overlooked as a potential source of information on a failed company. Yet assertions by Argenti (1976a) and an analysis of Altman's (1983) and McBarnet, Weston and Whelan's (1993) research indicates that employees can potentially observe the symptoms of distress. However, Argenti (1976a) reported that employees could only observe the non-financial systems of distress, and that they could not determine that an organisation was distressed. McBarnet et al's (1993) research and a pilot case study indicated otherwise. The pilot study also found that employees had access to the informal communication network, or grapevine, and an informal accounting information system (IAIS). McBarnet et al (1993) report that informal information may assist employees to detect problems or unusual events within a company.

Consequently, this research sought to clarify the anomaly between Argenti's assertions and McBarnet et al's (1993) and the pilot study's findings, determining the problems or concerns that employees observed in a company before it collapsed, and whether these observations could cause employees to believe that a company was distressed before it failed. The research also examined whether information from an IAIS and/or the grapevine contributes to employees' observations and opinions in a distressed company.

A single case study of a failed organisation was conducted. The subject was Fortex Group Limited, a South Island meat-processing company. The findings challenged and extended previous beliefs regarding employees' observations in a distressed company, indicating that they may not only observe the symptoms of distress, but also observe the defects and mistakes which cause, and contribute to, failure. Moreover, from the symptoms observed, the employees recognised that the company was distressed. The research also established preliminary links between the grapevine, IAISs, employees' observations and corporate distress. Each area was identified as an alternative source of information which could potentially assist the early detection of corporate distress. Despite limitations, this research increases the body of knowledge in these areas, and recommends directions for future research.

Acknowledgments

Thank you to my thesis supervisor Alan Robb and Adrian Sawyer for proof-reading chapters, and providing many valuable suggestions and comments which positively contributed to this research. Their efforts were appreciated.

Similarly, many thanks must be given to former Seafield Union Secretary Peter Binnie who selflessly gave his time and effort to this research. Peter, when himself under considerable pressure, managed to participate in, and organize, the interviews. Without Peter's efforts this research would not have been possible. Thanks must also be extended to the 14 former Fortex employees who graciously and willingly participated in this research.

Thank you to the members of the Avondale Golf Club, particularly those involved in the Woodward Cup team who tolerated a partially focussed golfer who never seemed to have enough time to practice or spend with the team.

Special thanks to my Mum and Dad, Patricia and Lance Tobin, for emotional and financial support throughout the duration of my participation in the Master of Commerce programme. Also, my two brothers Campbell and Dean, who with my parents always provided a happy and supportive atmosphere where tension and anxiety evaporated.

Lastly, I wish to thank Celestine who provided invaluable support, understanding and caring, and reinforced my self-belief in times when the odds seemed insurmountable.

Scott Tobin *University of Canterbury, 1995*

Chapter 1

Introduction

> *"I think there was the shock and the realisation to all the workers that something they had believed in so vigorously, something they had been so loyal to, had run aground. Someone in discussion said that it was akin to the icon of the government's ideals of free enterprise finishing up on the rocks."*
>
> Union Secretary Peter Binnie commenting on Fortex Group Limited's failure (Interview 14/8/95)

The failure of a company impacts on a variety of individuals, ranging from employees, to creditors and customers, and ultimately society itself (Milburn, Schuler and Watman, 1983). Often these groups only become aware a company is distressed in its last few months (Argenti, 1976a). Detecting distress at this stage is often too late as a poor financial position combined with a lack of time thwarts most turnaround attempts, meaning failure is almost inevitable. Furthermore, by this time the groups affected by failure have limited recourse to minimise its effect upon themselves.

To avoid these problems researchers have endeavoured to provide a means to detect failing companies in advance. The majority of such research can be categorised as following one of two methods, the analytic method and the list method (Argenti, 1977). The analytic method is derived from, and utilises, publicly available financial information in the form of financial ratios. Conversely, the qualitative list approach identifies the observable causes, and symptoms, of a failing company. These observable factors have been derived from a wide variety of information sources. However, a review of the individuals interviewed as part of previous corporate distress research reveals that non-managerial employees (henceforth referred to only as employees) appear to have been overlooked.

Admittedly, unlike managers, employees do not determine an organisation's strategy, nor may they be in a position to clearly assess an organisation's overall performance. However, they are 'insiders' and as such have both the position and the incentive to

be aware of their company's performance, for it is an organisation's members who are most directly affected by a crisis (Milburn et al, 1983).

Indeed, prior researchers such as Argenti (1976a), Altman (1983) and McBarnet, Weston and Whelan (1993) have indicated that employees may be able to identify weaknesses and problems which signify corporate distress. However, McBarnet et al's finding that employees and union members may detect creative accounting opposes Argenti's opinion that employees may observe the non-financial symptoms of distress. Moreover, the findings of a preliminary case study which revealed that employees were aware of distress four months prior to failure contradicts Argenti's statement that employees cannot identify that a company is distressed.

Consequently, this research sought to clarify the anomaly between previous research by examining whether an organisation's employees can identify that their company is distressed, or, are able to observe factors which contribute to, cause, or signal an organisation's failure. This component of the research was undertaken through a comparison of employees' observations with factors proposed in the corporate distress literature.

The preliminary case also revealed that employees from Fortex's Seafield plant also received informal information from an informal accounting information system and the company grapevine. McBarnet et al (1993) state that non-publicly available informal information contributes to an employee's and union's ability to detect financial and non-financial problems.

Therefore, this research also had a secondary objective of assessing whether the employees' identification of problems was influenced by inside informal information from an IAIS and/or the grapevine. This aspect of the research involved examining both the extent to which these two systems operated in an organisation and the information carried by, or contained within, each.

By examining these two areas it was hoped to ascertain whether employees themselves, or another external party using information from employees and/or informal information, could accurately assess whether a company is failing.

Therefore, potentially providing alternative information sources for the early detection of distress, or, failing that, indicating that employees may assist a post-failure analysis.

The research was undertaken using a single case study of employees from Fortex Group Limited[1], a failed South Island meat-processing company. The case study itself added to the previous body of corporate distress literature, many of which are individual cases of organisational failure, and provided an initial assessment of the previously unresearched area of employees' observations in a distressed organisation. Furthermore, this research is believed to be the first to investigate the role of informal information in a failed company and to assess whether there was any interrelationship between such information and an employee's perceptions of distress. By undertaking an initial examination of both areas several potentially fruitful areas for future research were raised, previous research was re-examined and extended, and the body of corporate distress knowledge increased.

The remainder of the thesis is structured in the following manner. Chapter 2 provides background information on the development of the research objectives, and outlines the interrelationship between employees, informal information and distress. The third and fourth chapters outline the characteristics of the grapevine and informal accounting information systems respectively.

Chapter 5 provides an overview of previous research into corporate distress. The chapter presents many of the recurring characteristics which are said to cause, contribute to, or be an observable symptom of, company failure. The method used for the research is presented, justified and critiqued in Chapter 6. Included in this chapter are the precautions utilised to minimise the potential limitations of the case study method, and outlines of the site selection and interview processes.

Chapter 7 presents an overview of Fortex's history, structure and performance in the years prior to its collapse. Within this chapter are the post-collapse criticisms of the

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[1] From this point forward Fortex Group Limited will be referred to as Fortex for the purposes of simplification.

company, including opinions proffered to, and offered by, the media as to why the company collapsed.

Chapters 8, 9 and 10 present the results of the case study pertaining to employees' observations and perceptions, the grapevine, and the IAIS, respectively. Lastly, Chapter 11 summarises the thesis, and presents and discusses the potential limitations of the findings, opportunities for future research, and the implications generated from the research for parties involved in a company's distress. In addition, a postscript is provided which details the results to date of the court proceedings against Fortex's former managing director, Graeme Thompson, and general manager of finance, Michael Mullen. Within the postscript the implications of the verdicts for the findings of this research are discussed.

Chapter 2

The Development of the Research Objectives

1. Introduction

This chapter consists of two sections. The first outlines the interrelationship between employees, informal information and corporate distress, the individual aspects of which are reviewed in detail in the following chapters. The second defines the terms failure, distress and collapse for the purposes of this research, based on the variety of terms used previously.

2. Employees and Distress

A review of previous qualitative corporate distress research reveals that non-managerial employees have seemingly been overlooked as a potential source of information on a failed company. Instead, where interviews or opinions are sought, a variety of other sources of personal evidence have been used.[2] These include the opinions of:

- Receivers or insolvency experts (Argenti, 1976a; Young, 1989; Greatorex, Holden Iliffe, and Wauchope, 1994);
- Accountants (Argenti, 1976a);
- Stockbrokers/investment analysts (Argenti, 1976a);
- Company founders (Bruno, Leidecker and Harder, 1987; Bruno and Leidecker, 1988); and
- Authors who have personal experience in the field of distress. Such authors are typically accountants or receivers (Hartigan, 1973, 1976; McKinlay, 1979; McQueen, 1989a, 1989b).

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[2] This style of research only forms a small portion of all qualitative corporate distress research, most of which is either the detailed examination of an individual case or the delineation of common factors from several individual cases of failure. In these circumstances, rarely is any mention made of the information used to document the case, or from where, or from whom, the information is obtained. However, it is likely that some of this information would be from personal sources.

From the sources listed it is evident that, in addition to being a party involved in, or exposed to, company failure, a professional level of business and financial expertise has also been required before a person's opinion is sought. Employees, who are not commonly believed to possess such skills, are ignored. However, this may be a disservice, because employees are 'insiders.' From their position they can directly observe the operations of a company. Therefore, it is unsurprising that two notable distress researchers, Argenti and Altman, have mentioned that employees are valuable sources of information in a distressed company.

2.1. Employees and Non-financial Symptoms

Argenti (1976a) postulated that, due to their relationship to the company, groups such as employees, suppliers and customers are in a position to notice certain non-financial symptoms of distress. Employees, in particular, were credited with the ability to observe a multitude of such factors, the first being low morale:

> *"Take low morale for example. This is certainly a symptom of a company that is recognized by its employees to not be successful or to be failing" (Argenti, 1976a, p 144).*

Within the range of symptoms capable of being observed by employees, Argenti (1976a) proposed that some may be obvious, making them easily noticed by such parties as company visitors:

> *"Employees and visitors alike may be able to see such obvious symptoms as dingy offices, poor maintenance, and a general air of financial stringency" (Argenti, 1976a, p 145).*

However, he also distinguished between some of the symptoms which suppliers, customers and employees could perceive, thereby indicating that the observation of certain symptoms may be restricted to particular individual groups. Symptoms mentioned as relating specifically to employees were:

> *"...greater resistance to pay increases, cuts in overtime and less generous treatment generally, delays in capital expenditure authorizations, rising stocks, the outdated product, the declining market share, the growing volume of customer complaints and an increasing desperation among the top, and later the middle, management" (Argenti, 1976a, p 145).*

According to Argenti (1976a) there were several other groups who could also observe the non-financial symptoms of distress. These groups included:

- bank managers–who watch the company's overdraft;
- the firm's accountants–who observe the financial ratios; and
- the stock exchange–which gradually marks down the shares.

However, each group only observes a limited number of symptoms and are not in a position to assess the organisation's overall performance (Argenti, 1976a). Furthermore, they are not expected to make use of the information. Instead, Argenti refers to the 'knowledgeable observer' who, through personal observation and gathering information from such individual groups as customers, suppliers, employees and managers, assesses the company's overall position.

Argenti's assertions, while indicating that employees may observe symptoms of distress, immediately raise four potential limitations:

- Firstly, non-financial symptoms occur late in the distress process (Argenti, 1976a). By this stage the company may have been distressed for a long period of time and be financially weak. Identification of distress at an earlier stage would allow more time and financial resources for a turnaround to be attempted.
- Secondly, other than low morale, Argenti (1976a) does not indicate whether employees realise they are observing the non-financial symptoms of distress. However, his recommendation that a knowledgeable observer is required indicates that an employee would be unlikely to report their observations ex-ante as symptoms or recognise that the organisation is distressed.
- Thirdly, because some symptoms can also be found in non-failing companies they only provide *"some confirmatory value"* (Argenti, 1976a, p 144). That is, they can not of themselves identify distress but, when viewed in combination with other factors which occur earlier in the distress process, can confirm that the organisation is failing. Therefore, again this indicates that employees are unlikely to recognise that the organisation is distressed.
- Fourthly, even if employees recognise that their observations are signs of failure, because they are not in a position to observe the overall position of the company,

the severity of the situation may be underestimated. According to Argenti (1976a), this problem could be negated somewhat if the employees contacted individuals in other areas of the organisation who hold differing information. Unfortunately, Argenti also asserts that this contact does not occur.

The limitations listed above indicate that, while employees are capable of observing symptoms, they would be unlikely to recognise them as such, or if they did so, the severity of the organisation's position could be underestimated. Furthermore, because they are unable to obtain information on the entire organisation's performance, observation is restricted to a limited number of non-financial symptoms.

While employees may not have an overview of the entire company, the turnaround of GTI Corporation reported by Altman (1983) indicates that they are likely to have detailed knowledge of their area of expertise. The findings also provide an indication that employees are more perceptive than Argenti attributed them to be.

In an attempt to detect under-utilised assets and improve the distressed company's profitability 250 employees of GTI's largest plant were asked for their opinions through the use of a questionnaire. Altman found that:

> *"The employees knew what was wrong. They were specific about how to improve the use of their machines. Many of the suggestions were implemented, and productivity improved (1983, p 201)."*

This ability to identify weaknesses in production process was not an isolated instance. Similar questionnaires were given to employees at another of the company's plants. In this case:

> *"The employee responses resulted in changing the plant's organization from functional to product line, another move which more effectively employed the company's assets.... After a few weeks, the plant began to return to profitability" (Altman, 1983, p 201).*

Altman's findings, like Argenti's (1976a), indicate that employees are aware of problems which affect a company. In this case such awareness was only demonstrated in the functional area of their employment. Nevertheless, Altman's findings also indicate that an employees' awareness may extend to areas which affect an organisation's profitability, a financial aspect which Argenti left unmentioned.

2.2. Employees, Creative Accounting and Financial Symptoms of Distress

The claim that employees' observations are restricted to non-financial symptoms may have arisen because employees do not commonly have access to financial information. Moreover, even where financial information is available, employees and unions are not believed to have the expertise, or inclination, to use it (McBarnet et al, 1993). However, McBarnet et al (1993), found that both employees and unions utilise financial information and that through such usage they could potentially detect creative accounting:

> *"Those who have rejected the value to employees of financial information may have overlooked the fact that workers also have access to a degree of inside knowledge with which to prompt and feed adversarial challenge; and indeed, to smell a "rat" in "creative" accounts" (McBarnet et al, 1993, p 93).*

Like the observation of non-financial problems, the employees' detection of creative accounting was credited to their position as insiders. McBarnet et al (1993) elaborated, reporting that the inside position allowed access to local knowledge and informal information which may prompt questions that external parties could not identify:

> *"Insider knowledge at a shopfloor level and local alerts and suspicions among the workforce itself also played a part in prompting a call for financial information and challenging it. Inside information ranged from rumour or gossip, reports in the local press, industry or some other grapevine to unusual events taking place in the company, often at production level" (McBarnet et al, 1993, p 93).*

As the preceding quote indicates, the unions and workforces used local knowledge, and information from networks, such as the grapevine, which operate inside and beyond the plant as the basis for identifying the problems which prompted the call for financial information. According to McBarnet et al (1993), these problems included changes in stock levels, customers comments, and changes in overtime levels, all of which are mentioned by Argenti (1976a, p 145) as non-financial symptoms of distress which employees may observe.[3] Inside information from this range of sources, combined with an understanding of the company, meant that

[3] These symptoms are provided on p 8.

employees and union members could make informed judgements of the company's performance and were in a better position than external parties to identify discrepancies in financial records (McBarnet et al, 1993).[4]

McBarnet et al's (1993) findings provide a preliminary link between informal information, and an employee's detection of the symptoms of distress. The findings also indicate that an employee's observations may also extend to financial information and creative accounting. The informal information carried by the grapevine, while being one of many sources of insider information, has also been linked to distress by Ezzamel and Bourn (1990).

Ezzamel and Bourn's (1990) examination of a distressed organisation revealed it had a defective accounting information system (AIS) which was incapable of scanning the environment. Consequently, the AIS did not provide effective early warning of crises. In that organisation, which also suffered from poor communication of accounting information, a grapevine system of communication developed. The grapevine was used as alternative communication channel and was the only means the organisation had for scanning the environment and detecting a crisis.

2.3. The Preliminary Case Study

In an attempt to ascertain what, if any, problems or difficulties employees observe in a company prior to its failure, a preliminary case study was conducted in late 1994. The case study involved interviewing three employees of the then recently failed meat marketing and processing company, Fortex. The research revealed that the employees, who were representatives of the Meat Workers Union, were aware of the company's distressed position up to four months prior to its collapse. During the course of an interview one of the former employees stated:

> *"From my perspective and from my job, I may have had a better position to understand or have concerns that the general public were not aware of."*

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[4] These findings raise implications for union members and workers trading shares, a phenomenon customarily associated with managers and directors. In New Zealand the relevant legislation for insider trading is the Securities Amendment Act 1988. A cursory glance reveals that employees would seem to be covered by the legislation. However, a detailed examination is outside the scope of this thesis.

Hence, this employee recognised that he held a better position than external parties to observe the failure of the company. The union delegates also indicated that they maintained an informal accounting information system and gained information through other informal sources. However, they did not indicate the type or quantity of information gained from such sources.

2.4. Summary

Previous research indicates that, due to their inside position, employees may potentially observe both the financial and non-financial symptoms of corporate distress. This ability was partially attributed to inside and informal information from such sources as an organisation's grapevine. A preliminary investigation revealed that three former Fortex employees believed that the company was distressed some time before it failed. They indicated that they maintained an informal accounting information system and gained information from the company grapevine.

3. The Research Objectives

The preliminary investigation revealed that employees' observations in a distressed organisation were an area which required more closer examination. Consequently, this thesis sought to examine whether employees who were both union and non-union delegates can observe the non-financial, or indeed any signs, that an organisation is distressed, and whether, from these observations, employees' can ascertain that a company is distressed. However, rather than just a replication of the earlier research with a larger, more diverse sample, this thesis also sought to examine the extent to which the two informal information sources, an informal accounting information system and the grapevine, contributed to employees' observations of problems, and potentially distress, within the organisation. This objective involved establishing what, if any, information the employees received from each system.

Neither informal information system has previously been researched in a distress context. While the grapevine has been found to operate in a distressed company (Ezzamel and Bourn, 1990), no prior examination has been attempted to ascertain the

information received from it in a distressed organisation. Previous researchers have only noted that it was one of a number of information sources which employees, as insiders, have access to (McBarnet et al, 1993). However, Argenti (1976a) reports that employees can potentially identify the symptoms of distress, and a preliminary study indicates that information was received from the company's grapevine. It could be that some information from the grapevine was used in that capacity.

The IAIS has no prior links to distress by other researchers other than the observation of an IAIS in the preliminary case. However, it is another inside source of information which the employees may have received information from. Furthermore, according to Ezzamel and Bourn (1990), an accounting information system (AIS) performs two roles in an organisation which faces a crisis:

- Firstly, an *"AIS can play a major role in shaping the perceptions of decision makers in relation to each of the crisis elements, as well as in relation to crisis management"* (Ezzamel and Bourn, 1990, p 400).
- Secondly, and importantly to corporate distress, *"...by scanning the environment, gathering early warning indicators, processing and reporting these indicators quickly, AIS can reduce perceived time pressure and surprise, and at the margin can help the organization prevent crises altogether"* (Ezzamel and Bourn, 1990, p 400).

If a company's formal AIS has a role in crisis detection and management (Ezzamel and Bourn, 1990), therefore, intuitively its informal counterpart an IAIS could potentially fulfil the same role.

4. Failure Defined

Previous researchers have classified a company as failed at a variety of different points in the distress process. For the purposes of his study, Miller defined failure as *"...protracted periods of poor profits and eroding market share but not necessarily bankruptcy"* (1977, p 43). A similar definition was adopted by Giroux and Wiggins. For their research failure was *"...any event which signals that a firm may be experiencing some degree of financial distress"* (1984, p 179). Alternatively, the works of Honsberger (1979), Hambrick and D'Aveni (1988) and the empirical work

of Altman (1968), and indeed most other empirical studies, have equated bankruptcy and failure.

These definitions are markedly different. Bankruptcy is a legally determined state which occurs at a definite point in time. That is, when the court declares the company bankrupt. The other definitions of failure, proposed by Miller (1977) and Giroux and Wiggins (1984), are broader than that of bankruptcy. They also include a period in which the organisation exhibits signals that the organisation is distressed or failing, but has not yet failed. Hence, the definition of failure is malleable and differs markedly between researchers.

In New Zealand companies are placed into receivership rather than being made bankrupt. After the appointment of a receiver the company may continue to trade and/or be liquidated. Similarly, depending on the type of application made to the court, bankrupt companies can continue to trade, restructure, or be liquidated. Hence, in New Zealand receivership is the equivalent term to bankruptcy.

This thesis intends to examine Fortex's informal information systems up to the point at which the receiver was appointed. Hence, for the purposes of this research the point of failure of the subject, Fortex, will be the time that Fortex was placed into receivership, that is, March 23rd 1994. Subsequently, the company's assets were liquidated, but it is at the earlier point that employees, the sample used for this research, ceased to hold a position as insiders.

However, defining the point of failure is only the first point in clarifying the terminology as it is applied in this research, for there are two other synonyms for failure, namely distress and collapse, which are also commonly used. While collapse has been equated with bankruptcy (Boocock and Drozd, 1982) and receivership (Young, 1989), further confusion is caused when Argenti's definition is considered.

Argenti defined collapse as occurring *"...when a company, which has hitherto been operating successfully, first begins to falter and then has to fight to remain profitable"* (1976a, p 5). He continued by stating that *"...the key element is the transformation from corporate health and prosperity to a struggle for survival"*

(1976a, p 6). Hence, like failure, collapse can potentially include a considerable period of time prior to legal failure.

To avoid such confusion this research will assign terms to specific parts of the failure process. Thus, failing, distressed and collapsing will refer to periods where a company is struggling but has not yet been placed into receivership. Failed and collapsed will refer to periods when an organisation has been placed into receivership or, in the American literature, has filed for bankruptcy.

Chapter 3

The Grapevine

1. Introduction

Each organisation has a formal system of communication which is established and regulated by that entity's management (Wooten, 1981). The formal system's structure normally follows the formal channels of authority and therefore corresponds to the organisational chart (Wooten, 1981). However, organisational communication is not restricted to the formal channels (Bavelas and Barrett, 1951). Instead, people often create informal communication systems which do not follow the company's hierarchical structure (Bavelas and Barrett, 1951). These informal systems are an integral part of an organisation and are essential to its continued functioning and communication (Barnard, 1938). One such system is the grapevine.

This chapter outlines the characteristics, attributes, and provides an understanding of the information communicated by the grapevine system. Included is an analysis of whether previous research indicates that grapevine information could be useful to assist the detection corporate distress.

2. The Grapevine

The grapevine, or informal communication network[5] (Walton, 1961; Sharma, 1979; Simmons, 1985; LaBarre, 1994; Wells and Spinks, 1994), is an informal and spontaneous communications network used by an organisation's employees which does not follow the formal organisational structure (Brownell, 1990; Zaremba, 1988, 1989).

Inherent within every organisation (Davis, 1953b; Walton, 1961; Downs, 1967; Davis, 1972; Simmons, 1986; Wells and Spinks, 1994), the entire content of the grapevine is incorrectly typified as malicious rumour. Its perceived inaccuracy, combined with its rapid speed and ability to spread a rumour throughout the entire

[5] The grapevine is also referred to as a company's informal information network (Small Business Reports, 1993), or simply its informal network (Zaremba, 1988).

organisation, has resulted in it being viewed as an unnecessary and disruptive element which undermines the formal communication system (Davis, 1953b; Nicoll, 1994). Consequently, the grapevine is a much maligned part of the organisation. However, a considerable amount of popular opinion which surrounds the grapevine is incorrect. Rather than being an unnecessary inconvenience which is begrudgingly accepted, the grapevine is an important element in every organisation which should be acknowledged and used.

Managers wishing to be free of informal communication fail to understand that a grapevine indicates the vitality of an organisation (Davis, 1969). Grapevine communication indicates that employees are interested in their job or events which affect their work environment (Walton, 1961; Davis, 1969; Arnold, 1983). As the noted grapevine expert Keith Davis states:

> *"[i]f employees are so disinterested in their work that they do not engage in shop talk, they are maladjusted. A lively grapevine reflects the deep need of people to talk about their jobs and their company as a central life interest" (1969, p 54).*

Hence, an organisation lacking a grapevine would be unhealthy (Walton, 1961; Davis, 1969). Without the informal communication the grapevine carries, an organisation's overall functioning and communication would be inhibited (Barnard, 1938).

The grapevine also provides a valuable source of operating intelligence, acts as a means to generate and maintain corporate memory, reinforces work standards and group norms (Brownell, 1990; Nicoll, 1994), and disseminates information with speed and economy (LaBarre, 1994). Nevertheless, its many positive and beneficial aspects are habitually overlooked.

3. Characteristics of the Grapevine

Davis (1953b) identified four significant characteristics of the grapevine: speed of communication; the locale of the grapevine; relationship of the grapevine to formal communication; and a degree of selectivity which referred to the information

transmitted via the grapevine. However, there are two additional important characteristics, the grapevine's accuracy and its structure.

3.1. Speed

Grapevine communication is fast (Davis, 1953b; Caplow, 1976; Downs, 1967; Wooten, 1981; Zaremba, 1988; Goldhaber, 1993). In one example, provided by Davis (1953b), a manager's wife had given birth at 11pm. Within the next 14 hours, of which only 5 to 6 were spent at work, 31 other managers were informed via the grapevine. However, its speed is not restricted to personal information. The grapevine often pre-empts information from the formal communication system (Davis, 1969, 1972; Hussey and Marsh, 1983; Mishra, 1990; Wells and Spinks, 1994).[6] The literature is rife with anecdotes of employees hearing about events, such as resignations and dismissals, through the grapevine hours or even days before an official announcement (Zaremba, 1988).

The grapevine's speed arises because it avoids the restraints imposed by formal communication channels. In so doing, the information may not be exposed to cross-checks which verify a message's validity or accuracy (Walton, 1959; Garnett, 1992). Lacking accuracy checks, the grapevine would intuitively seem more error prone or inaccurate than the formal system.

3.2. Accuracy

Grapevine communication is typified as rumour. Rumour is defined in the Concise Oxford Dictionary as *"...general talk or hearsay of doubtful accuracy"* or *"...a current but unverified statement or assertion"* (Allen, 1990, p 1055). Hence, the classification of all grapevine communication as rumour propagates the popular belief that the entire grapevine is inaccurate. However, this reasoning is flawed in two fundamental respects.

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[6] Sharma (1979), Wooten (1981), Arnold (1983), Zaremba (1989), Brownell (1990), and Garnett (1992) also state that the grapevine provides information more quickly than formal communication channels.

Firstly, when referring to the grapevine, rumour is defined as *"...grapevine information which is communicated without secure standards of evidence being present"* (Davis, 1972, p 268). Hence, rumour is only that part of the grapevine which is injudicious and untrue. Categorising all grapevine information as entirely consisting of speculation or rumour is a mistake.

Secondly, as Table 3.1 indicates, five researchers have determined that the grapevine is at least 75 percent accurate.

Table 3.1: Research into the Grapevine's Accuracy

Author	*Accuracy Level*	*Organisation Type*
Walton (1961)	82%	Naval Ordinance Station
Marting (1969)[7]	80%	Manufacturing Organisation
Rudolph (1971)[8]	80%	Public Utility Company
Davis (1972)	80-99%	Manufacturing Organisations
Hymowitz (1988)[9]	75-95%	Various

This level of accuracy has resulted in suggestions that grapevine information is often more accurate than formal communication (Terry, 1972; Arnold, 1983; Garnett, 1992; Wells and Spinks, 1994).

Walton's (1961) and Davis's (1972) findings have received acceptance and been cited by other authors such as Arnold (1983), Simmons (1985) and Brownell (1990). However, each of the later works have failed to regard the provisos Walton and Davis placed on their accuracy figures:

- Firstly, Walton (1961) admitted that his findings were severely limited by the method he used to assess the accuracy of grapevine information.

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[7] Reported in Goldhaber (1993).

[8] Reported in Goldhaber (1993).

[9] Reported in Wells and Spinks (1994).

- Secondly, both Davis's (1972) and Walton's (1961) research was restricted to non-controversial, work-oriented information. Davis admitted that *"...it is probable that accuracy is not so great for personal or highly emotional information"* (1972, p 263). Consequently, the overall accuracy of the grapevine is likely to be lower than 80 percent.[10]

- Thirdly, while the overall accuracy of the grapevine for company-related information is approximately 80 percent, no single message will be entirely correct or incorrect. Instead, each grapevine message contains a portion which is inaccurate (Davis, 1972). The level of inaccuracy differs for each individual message, but averages 20 percent for all grapevine messages.

Unfortunately, the 20 percent average inaccuracy is often the most critical portion of a message and can distort it to the extent that it loses its initial meaning or at worst becomes untrue. The grapevine's purported inaccuracy arises from this distortion. People more readily remember the rare, severely distorted rumours than the many occasions where the grapevine provides accurate information (Davis, 1972). Furthermore, grapevine information is usually incomplete, making messages easily misinterpreted (Davis, 1972).

3.2.1. Grapevine Distortions

As most grapevine messages start as a report of an actual event, any distortions or misinterpretations must occur when the information is transmitted from person to person (Allport and Postman, 1947). Research has indicated that most occur at the beginning of the chain (Allport and Postman, 1947; Caplow, 1976; Garnett, 1992). Hence, a person at the end of the chain will receive the most distorted version of a message.

Distortion generally occurs in three ways which are:

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[10] While the research undertaken in this thesis only concerns company related, and not personal, information, there remains scope for distortions as any distressed situation would increase the emotional content of the grapevine.

- Simplification or filtering: where information is reduced to a few basic details (Caplow, 1966; Davis, 1972). In many cases simplification occurs when individuals forget details of the message. Often the gaps left are filled or recreated (Brownell, 1990), thus introducing further distortions.

- Assimilation: where an individual amends and relays, either consciously or unconsciously, information that re-enforces their pre-existing attitudes (Davis, 1972; Brownell, 1990).

- Elaboration: where grapevine participants distort messages by introducing their own biases, opinions, feelings or reasoning to a message (Davis, 1972).

By the time a message has passed through several people, it may become so distorted that its initial meaning is lost. Furthermore, the distortions introduced predominantly concern bad news (Simmons, 1985, 1986; Brownell, 1990). Hence, any message is likely to be distorted for the worse rather than for the better. Example 4.1 provides a common scenario of an event which is distorted as it passes through the grapevine:

Example 4.1[11]

> John Worker cut two fingers of his left hand at his machine one morning. He was sent to the dispensary for first aid, and he returned to his job in about thirty minutes with his fingers bandaged. Meanwhile, word had spread through the shop that John had cut his fingers. The farther from John's department the story travelled, the more gruesome were his injuries, until finally the story had him losing his left hand.

Distortion is somewhat limited by the circularity of the grapevine system where individuals may receive and send the information on more than one occasion. Moreover, even though they may be so distorted that they are entirely inaccurate, a rumour indicates the employees' feelings and concerns, and is based on an underlying factual event. Therefore, rumours should be investigated by management (Davis, 1972). However, according to Davis, it is the same distortion and the incompleteness of grapevine messages which *"...mean[s] that in total it [the*

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[11] Adapted from an example provided by Davis (1972, p 269).

grapevine] probably produces more misunderstanding than its small percentage on wrong information suggests" (1972, p 264).

3.3. The Grapevine's Relationship to Formal Communication

The grapevine relies on personal communication for the transmission of information (Davis, 1953b). Because its participants are not constrained by their formal position, grapevine communication can by-pass formal communication channels. The resulting communication can, and does, cross functional groups, hierarchical levels (Davis, 1953b), and organisational boundaries (Davis, 1969; Grant, 1987). Hence, grapevine communication can arise between managers and non-managers, employees in differing departments and even employees and non-employees.

These boundary spanning characteristics result in the formal system being occasionally undermined, particularly where confidential or privileged information is disseminated prior to an official announcement. However, the grapevine also forms an important adjunct to the formal communication system, without which communication as a whole would be less effective (Wooten, 1981). The formal and informal systems interrelate and support each other in two ways:

- Firstly, by providing an employee with information from different sources and information which is not suitable for the formal system (Walton, 1961), the grapevine provides information complementary to that received from formal communication (Hayden, 1986; Zaremba, 1988; Garnett, 1992).

- Secondly, it can also act in a supplementary manner to the formal system (Davis, 1953b; Caplow, 1976; Arnold, 1983; Mishra, 1990). For instance, due to its speed, the grapevine may pre-empt information from the official communication channels. Where the formal system verifies the content of the grapevine, the grapevine has performed in a supplementary role (Davis, 1953b).

The complementary and/or supplementary nature of grapevine information means that there is always a niche within each organisation for the grapevine to operate. However, because the grapevine cannot carry all the information that a formal system

can, it cannot replace the formal system. Furthermore, the grapevine may not reach as many, or the necessary people, as the formal communication channels.

The volume of information received, whether complementary or supplementary, is inversely related to the effectiveness of communication from the formal system. Hence, the grapevine is less active when formal communication is functioning correctly[12] (Walton, 1961; Wooten, 1981; Arnold, 1983; Pozgar, 1986; Booher, 1990; Mishra, 1990). Moreover, the grapevine is rendered less effective if the formal system over-supplies information on topics related to that in which the employees are interested (Caplow, 1976).

3.4. Locale of the Grapevine

3.4.1. Internal Locale and Participants

The grapevine predominantly operates at the place of work (Davis, 1953b). Davis (1953b) found that even where the local community is small, people overhear most of their information about company activities at the plant.

3.4.1.1. Who uses the grapevine?

The grapevine is usually associated with floor or blue-collar workers, for whom the grapevine ranks second, only behind an employee's direct supervisor in importance (Friedman, 1981). However, it is a misnomer that reliance upon, and usage of, grapevine information is restricted to non-managerial employees. Managers also use the grapevine extensively (Davis, 1953b; Sharma, 1979; Anon, 1994a; Anon, 1994b) and, similar to non-managers, research has found that managers may also find the grapevine more useful than formal communication (Harcourt, Richerson and Wattier, 1991).

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[12] There is one dissenting opinion from Davis (1953b) who found that the grapevine and the formal system were positively associated. That is, if the formal system is not functioning effectively, neither will the informal system.

3.4.1.2. Employees' Grapevine Usage and Perceived Accuracy

An employee's reliance on grapevine information is determined by how accurate the information has proven to be in the past (Wells and Spinks, 1994). For example, Walton (1961) and Friedman (1981) determined that employees perceive the grapevine to be accurate at least 50 percent of the time.[13] Therefore, it is unsurprising that Modic (1989) reports that employees trust the grapevine's content more than information from any management group.

The grapevine's perceived accuracy and legitimacy is reinforced where management denies information carried by the grapevine, only to confirm it later when they receive the information through the slower official channels (Zaremba, 1988). Therefore, non-managerial employees will refer to the grapevine for information if the formal channels are inaccurate or slow. Managerial employees will also rely more heavily on the grapevine if the formal system has proven less accurate or inadequate in the past.

3.4.2. External Locale and Participants

While the grapevine reaches most people within a company, it may also ignore organisational boundaries and extend into the local community (Davis, 1969; Nofel, 1985; Grant, 1987), gaining information from, and supplying information to, persons outside of the organisation (Arnold, 1983). These external parties can include spouses, friends and relatives, and former employees (Davis, 1969).

Informal communication has also been established as occurring between companies (von Hippel, 1987; Schrader, 1991; MacDonald 1992a, 1992b). For example, Davis (1969) discovered that manufacturers' representatives from different companies were grapevine participants. This phenomenon has been found particularly in highly technical fields where information is collected, and sometimes traded, by individuals acting as gatekeepers (MacDonald and Williams, 1992; MacDonald, 1993).

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[13] Friedman (1981) found that 52.3 percent of the employees reported the grapevine was accurate, while Walton (1961) found that 78 percent of employees believed it was accurate more than half the time.

Gatekeepers are *"...employees assigned to stay informed in selected areas, and then direct the flow of information to other employees as needed"* (Dixon, 1991, p 19). They can be either fulfil the role informally (Hayden, 1986), or can be formally appointed within an organisation (Dixon, 1991; MacDonald and Williams, 1993, 1994).

The gatekeeper process is distinct from the grapevine system. However, by disseminating the information to employees within their own company, gatekeepers could be an external source of information which can be carried by the grapevine. Furthermore, the grapevine itself can extend between competing companies (Nofel, 1985). Grapevine participants who communicate with individuals in other companies effectively operate as gatekeepers.

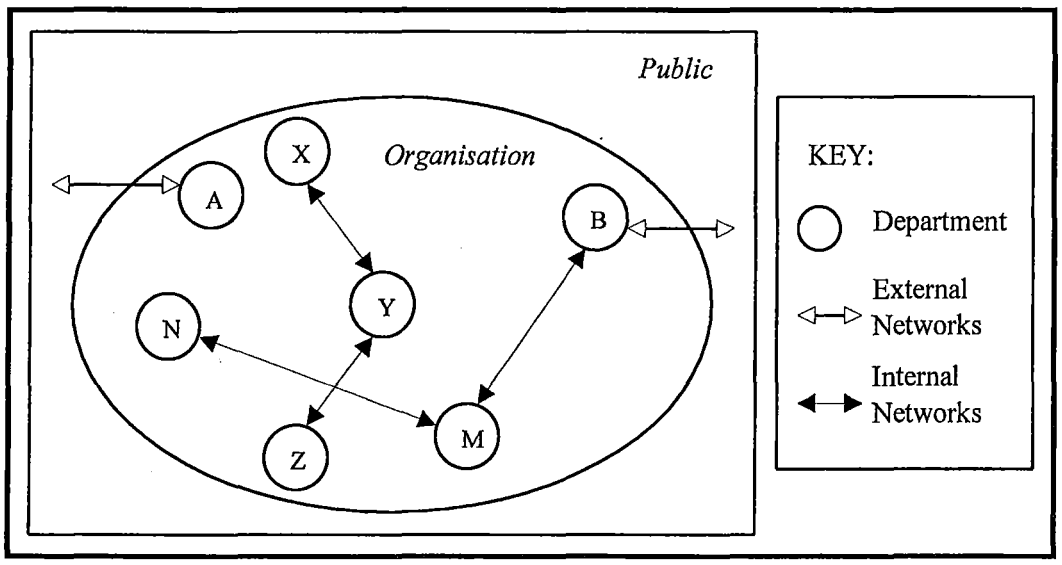
The information provided from both the inter-company grapevine and informal information transfer can be used to indicate industry and competitor practices, and environmental changes, which in turn can aid strategic decision making (Nofel, 1985; Weedman, 1992). By providing information on these issues, the grapevine can communicate information which could directly affect a company's performance, cause it to lose competitive advantage, and ultimately contribute to corporate distress.

3.4.3. Non-personal Information Sources

External grapevine information is not restricted to personal sources. Employees also glean information, and form opinions, from information in newspapers, magazines and on the television (Hull, 1994). Such information may include predictions about economic downturns in the specific industry or general economy, which may lead employees to incorrectly doubt the viability of their company (Hull, 1994).

The external and internal portions of the grapevine interrelate so that employees may receive information from both within and outside of the organisation. This relationship is depicted in Figure 3.1.

Figure 3.1: External and Internal Networks[14]



Note that not all of an organisation's employees may receive information from external sources. Some external information passed via informal communication is kept for personal use by one department's gatekeeper (A) who does not pass the information to any others. Conversely, the gatekeeper in department B passes information which reaches two other departments (M and N). However, this information does not reach the employees in departments X, Y, and Z who only have access to information from the internal network. Hence, the messages individual departments and employees receive may differ depending upon their contact with other internal or external grapevine participants. This difference arises due to the grapevine's structure.

3.5. Structure

Because the grapevine does not follow a company's formal communication system, its structure is different and more flexible (Davis, 1953b). The common perception of the grapevine communication is that of a linear chain, where A communicates to B, B to C and so on. Allport and Postman (1947) proved that this method of communication severely distorts the content of a message.

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[14] Adapted from Zaremba (1989, p 9).

Davis (1953b) proposed four alternative structures that a grapevine could feasibly take. These alternatives, single-strand (linear), gossip, probability and cluster, are shown in Figure 3.2. He found that, contrary to popular perception, the grapevine is not a single strand chain but a cluster chain.

In a cluster chain a few people, termed liaison individuals,[15] perform all of the communication (in the cluster chain example shown in Figure 3.2 these would be individuals A, D, and I). Commonly 10 percent of employees function in this role at any one time (Davis, 1953b; Sutton and Porter, 1968).

Staff members most frequently function as liaison individuals because they can constantly move through different departments (Simmons, 1985). However, the exact composition of this group is unclear with Davis (1953b) finding that liaison employees differed for different messages, and Sutton and Porter (1968) finding that people consistently performed in a liaison role.

The cluster chain also consists of two other types of persons; isolates or passive receivers, and dead-enders (Davis, 1953b; Simmons, 1985). Dead-enders are those people who receive the message from liaison individuals, but do not transmit it to others (Davis, 1953b). In the cluster chain example shown in Figure 3.2 these would be individuals C, F, B, and K. Research indicates that 57 percent function as dead-enders (Sutton and Porter, 1968).

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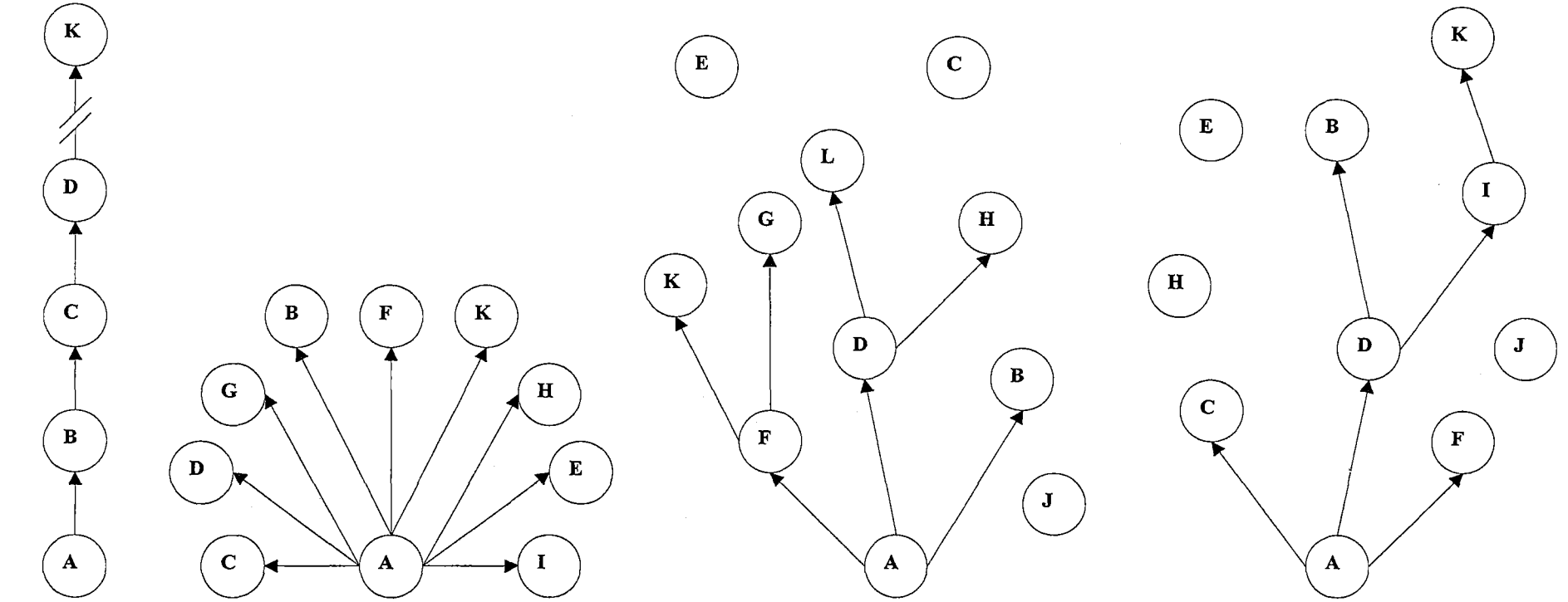
[15] Jacobsen and Seashore (1951) created the term 'liaison individuals' when they found that a small group of individuals functioned in a role as communicators in their research into communication practices in complex organizations.

Figure 3.2: Types of Communication Chains*



1. Single Strand 2. Gossip 3. Probability 4. Cluster

*Adapted from Davis (1953b, p 45).
Each letter represents a person, each arrow represents grapevine communication.
1. The single strand chain represented the commonly held view where A communicates to B, B to C and so on in a linear manner (Davis, 1953b).
2. The gossip chain would occur where one person, A, seeks out and informs everybody else (Davis, 1953b).
3. The probability chain is where A communicates at random to whomever they meet first. Those persons who choose to communicate to others also do so in a random manner (Davis, 1953b).
4. The cluster chain is where A tells information to *selected* people. If these people choose to communicate the information, they will only do so with other *selected* people (Davis, 1953b).

The last group, isolates, are those individuals who do not receive the information or receive the information poorly (Davis, 1953b). In the cluster chain example shown in Fig 3.2 these would be individuals E, H, and J. Sutton and Porter (1968) found that 33 percent of a company's employees functioned as isolates.

The grapevine's cluster chain structure is affected by many factors such as the layout of buildings and offices, hobbies and activities which employees have in common, and even the formal network (Zaremba, 1988). Therefore, due to the geographical and/or social position within an organisation some employees will be isolated from the grapevine (Davis, 1953b). For example, employees who work at a different geographic site or department, or move in different social circles, from liaison individuals, may not be privy to grapevine information.[16]

However, the cluster chain has advantages to those people that are privy to it. Due to the structure of the chain, liaison individuals and dead-enders are likely to get fast and accurate information from the grapevine. For example, referring again to Figure 3.2, person K in the cluster chain would receive information that has passed through only three other people; A, the originator of the message, D and I. Under the conventional, single strand view of the grapevine, K would receive information that has passed through ten people; A, the original liaison individual, and B through to J. By passing through fewer individuals, the message flows around the grapevine quickly, and has less scope for the distortions which occur in the transfer of information from person to person.

3.6. Topics Carried

Davis noted that *"[i]nformal communication ... arises from the social and personal interests of people rather than the formal requirements of an organization"* (Davis, 1954, p 217). Due to its social nature, it is commonly held that the grapevine carries

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16 Therefore, the interviews conducted as part of this thesis may involve people who, by not being privy to grapevine information, will provide no assistance. Furthermore, the grapevine, by being affected by many factors including the layout of building and offices, may function differently at various sites, therefore affecting the generalisability of this research.

anything, any time, anywhere (Arnold, 1983). However, this is somewhat simplistic and incorrect as the grapevine does not carry patently false information (Simmons, 1985), and has been found to exhibit a degree of selectivity[17] (Davis, 1953b). Moreover, the grapevine only disseminates new information (Walton, 1961; Davis, 1972), the majority of which concerns the work-place, because it is the common link between employees (Simmons, 1986). However, the grapevine also carries personal gossip and rumour (Goldhaber, 1993; LaBarre, 1994).

Amongst the topics which employees communicate about are such issues as management-union relations, job promotions, safety conditions, bonuses, lay-offs, contract talks and the like (Esposito and Rosnow, 1983). Therefore, the grapevine provides a communication channel for employees to express their concerns and seek assurances about issues which could directly affect their livelihood. As such it would be unsurprising for speculation about the collapse or failure of their work-place to be communicated via the grapevine.

4. The Grapevine and Corporate Distress

Davis's (1954) research found that the grapevine quickens it pace when a company is in a period of transition, change or crisis. Subsequent articles by authors such as Esposito and Rosnow (1983), Simmons (1985) and Garnett (1992) assert that in addition to increased speed, the volume of information carried by the grapevine increases in such periods. The communication helps the employees understand their environment and relieve tension and stress (Esposito and Rosnow, 1983; Simmons, 1985, 1986; Mishra, 1990). Therefore, in any distressed situation, communication on the grapevine will be more prolific as people seek to understand and interpret the events which may affect them. Hence, increased activity could signal the onset of an organisation's distress.

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[17] Davis (1953b) found that even the grapevine has a type of confidential information which was not passed to those people not meant to hear it. However, Davis also acknowledged that the extent to which the grapevine can be counted upon to discriminate for such information was questionable.

However, during such periods the grapevine is likely to contain more emotional content which could lead to a reduction in the accuracy of the information carried. Moreover, if the formal communication system provides little information, the employees may resort to speculation with little factual basis (Brownell, 1990). This speculation may also decrease the accuracy of the grapevine's content, and could result in the exaggeration or inaccurate depiction of events. However, the grapevine's accuracy with respect to company related information has been established as approximately 80 percent. Therefore, the distortion will need to be severe before the information carried would be wholly, or even mostly, inaccurate.

Furthermore, regardless of the level of distortion introduced, the grapevine will continue to carry information on the underlying facts which initially caused the employees' concern (Davis, 1972). Table 3.2 displays examples of the events which are the subject of grapevine communication. Many of these issues, such as transitions in leadership,[18] entrenchment/lay-offs and union strikes/employee-management relations,[19] have been identified as factors which potentially lead to, or indicate, corporate distress. Hence, distress or internal problems within a company are the subject of grapevine communication.

While the examples in Table 3.2 only refer to events internal to the entity, employees may also have access to grapevine information from external sources. Such information, which is obtained from both personal and impersonal sources and which can even extend to information on competitors, may also allow the identification of areas of concern. For example, employees may identify where competitors are out-performing their own company. Competition is a major contributor to organisational failure (Hartigan, 1976; Boocock and Drozd, 1982; Milburn et al, 1983; Scherrer, 1988; Makridakis, 1991).

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[18] For example see Gilson (1990) and Robb (1986b).

[19] See Robb (1986b).

Table 3.2: Events which are the Subject of Grapevine Communication

Author	*Grapevine Communication*
Davis (1953b)	Executive Resignation
Davis (1969)	Transfer of Manager to another Division Promotion
Davis (1972)	Company Relocation Employee-Management Relations
Davis (1973)	Company Relocation Resignations Impending Lay-offs Computer Installation
Arnold (1983)	New Computers Promotions Procedures Transfers Job Performance Employment Opportunities
Simmons (1986)	Retrenchment
Esposito and Rosnow (1983)	Management-Union Relations Job Promotions Safety Conditions Bonuses Lay-offs Contract Talks
Davidson (1988)	Crises Powershifts
Brownell (1990)	New Equipment Installation Changes to Schedules New Managerial Appointment Expansion or Renovation
Garnett (1992)	Lay-offs Transitions in Leadership Union Strikes
Overholt (1992)	Rapid Growth Downsizing Mergers
Goldhaber (1993)	Retirement Job Opportunities Wage Rises

Furthermore, Overholt (1992) asserts that a 'well-connected employee', that is, one with personal contacts in a variety of departments, can often gather diverse information together to predict and interpret a company's strategy in a changing environment. Overholt (1992) gave rapid growth, downsizing or merging as examples of change. All of these activities have been identified as signs of corporate

distress (Robb, 1986b). Therefore, in distressed situations, some individuals may be privy to enough grapevine information to provide an overview of the company's position.

The way a well-connected employee reacts to a situation also influences the manner in which other employees respond to the change (Overholt, 1992). Such employees may inform others via the grapevine as to their view of events or remain silent. If only silence is forthcoming, other employees will interpret a well-connected employee's actions, such as looking for another job, remaining with the company, or continuing to work cooperatively, and respond accordingly (Overholt, 1992).

Previous grapevine research indicates that through their position within a company, employees participate in, and have access to, an information source which could potentially be used to identify factors which promote corporate distress. However, whether they realise they have this ability is another matter. It is possible that many employees recognise an event as affecting their job, but may not perceive the effect it has on the organisation, particularly because it is unlikely that most employees have an understanding of the many factors that are said to cause, or indicate, distress. Furthermore, employees' ability to identify distress may also be inhibited where they have little or no access to the grapevine or where they do not believe the information carried by the grapevine.

5. Conclusion

Contrary to popular perception, the grapevine is a large, accurate and fast communication network which is used by managers and floor workers alike. The information it carries predominantly concerns the organisation itself, as that is the one thing employees have in common. In times of stress or change, grapevine activity increases as employees attempt to clarify uncertainty. Therefore, in a crisis, any information which affects employees' jobs will be conveyed to employees around the company. Some of the issues discussed on the grapevine have been identified as contributing to corporate distress. Therefore, the grapevine may provide information which could assist employees to detect of distress.

Chapter 4

Informal Accounting Information Systems

1. Introduction

An organisation's accounting information system has two components: a management accounting system and a financial accounting system (Hansen, 1990). Each serves different needs. The financial system is externally focussed, following standards and guide-lines which prescribe the financial information which the public should receive, and how that information should be prepared. The management accounting system is internally focussed, and provides managers with information for planning, controlling and decision making (Hansen, 1990).

Without externally imposed restrictions, management accounting information can be prepared for the individual needs of differing departments, product lines, and managers (Hansen, 1990). Unfortunately, the information produced can be too limited, too aggregated, too late or unreliable, therefore not meeting managerial requirements (Mintzberg, 1975; Johnson and Kaplan, 1987; McKinnon and Bruns, 1993). To compensate for these inadequacies, managers often construct their own informal accounting information systems (IAIS) (Mintzberg, 1975; McKinnon and Bruns, 1993).

This chapter provides an overview of previous IAIS research, and includes an assessment of its characteristics, such as what information they contain and who maintains them. The body of the chapter is split into three sections. The first reviews IAISs found incidentally in other research. The second examines explicit IAIS research. Then, within the third section, several potential interrelationships between informal accounting information and corporate distress are proposed.

2. Informal Accounting Information Systems

2.1. Incidental IAIS Findings

IAISs were first noted by Simon, Guetzkow, Kozmetsky and Tyndall (1954) in their study of six large North American companies.[20] They observed that operating executives kept 'black books' or 'butcher books' which showed signs of constant use. The records were summary in nature, requiring little time to update or operate, and gave the kinds of figures that supervisors and executives found *"significant and useful"* (Simon et al, 1954, p 34). Examples of such useful figures included:

- accounting figures transcribed from the formal records for quick reference;
- the translation of data into physical terms; and
- figures from basic production reports (Simon et al, 1954).

The IAISs were maintained because the formal system failed to provide the information managers desired, or did not meet managers' needs quickly enough (Simon et al, 1954). For example, the basic reports originated with the factory's time and production clerks. By going to the source the executives obtained the data before it became available from the formal accounting system (Simon et al, 1954).

Myers (1970) found that lower level managers maintained small information subsystems. However, in this instance the subsystems were:

> *"... developed by managers in an attempt to measure self performance and make decisions in response to the performance schemes informally reinforced by top executives" (1970, p 201).*

Whereas Simon et al's (1954) managers utilised informal accounting information for decision making purposes, the systems in this case had the secondary purpose of maximising the manager's financial returns. Therefore, Myers (1970) findings

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[20] The companies were: General Mills Incorporated; Eastman Kodak Company; H. J. Heinz Company; the National Supply Company; Westinghouse Electric Corporation; and two divisions of the U. S. Steel Company (Simon et al, 1954).

indicated that an IAIS may be used for company-related and/or purely personal reasons.

Similarly, Hopwood (1973, 1974) discovered, in a budgeting context, that managers, dissatisfied with the quality and timeliness of information:

> *"...designed and operated independent information systems which provided timely and parsimonious information relevant to their own personal needs" (1973, p 123).*

The IAISs were used for a variety of reasons including budget manipulation, and defending the manager's decisions and departments. They ranged from regular but limited notes to a level of complexity comparable to the organisation's official accounting system (Hopwood, 1973). Hopwood believed that these systems were:

> *"...capable of providing some further insights into the anxieties experienced by the cost centre heads and the behaviours which were intended to cope with the tensions and pressures" (1973, p 123).*

Therefore, informal accounting information may document areas which cause managers the most concern or which they see as particularly important. These areas, being important and needing personal attention, may indicate weaknesses within an organisation, such as production inefficiencies or a poor formal accounting system, which could contribute to distress in an organisation.

Latterly, IAISs have been noted by Earl and Ong (1987) and Davis and Olson (1985). Earl and Ong's (1987) IAISs were found in a treasury management setting, where again the formal systems were inadequate and provided information too slowly. Davis and Olson (1985) reported that IAISs may supplement or duplicate the formal accounting systems, and that occasionally an IAIS may receive official sanction and be encouraged. They also asserted that many varied IAISs exist in organisations. For example:

> *"An industrial sales manager might maintain a separate file of performance data on sales representatives which she uses to augment the information received from the formal sales information system" (1985, p 51).*

This quotation is typical of the earlier findings of Simon et al (1954), Myers (1970) and Hopwood (1973, 1974), in which IAISs were maintained only by managers or persons in a position of authority and responsibility. However, IAISs can occur at a

very low level of an organisation. For instance, Lupton (1963) found that workers in an electrical component factory manipulated their wage incentive scheme using such a system:

> *"...every worker kept a notebook in which he recorded the jobs which he had worked on, the actual time taken to complete them and the time which he had reported in the official records" (Hopwood, 1973, p 125).*

Therefore, while being more likely to be kept by managers, IAISs can be found at any level of an organisation where people need timely, accurate and detailed information, and where it is in the person's interest to keep such records.

2.2. Formal Research into IAIS

2.2.1. Clancy and Collins

The first reported research into IAISs appears to have been in 1979 when Clancy and Collins conducted research into the existence of IAISs and its relationship to an enterprise's formal AIS.[21] They defined an IAIS as *"...non-legitimised sets of records concerning items typically of an economic or quantitative nature"* (1979, p 22), and suggested that these records were kept on mediums ranging from scraps of paper to computer files.

A pilot study performed in a single organisation found that nearly all the respondents maintained that the formal AIS was more efficient and effective than an IAIS. The findings were a surprise for it was hypothesized that the primary reason for utilising an IAIS would be due to deficiencies in the formal system. Instead, they were maintained to provide additional information for the managers personal needs, including performance assessment of themselves and their departments. However, while not meeting all of their information requirements, the managers recognised that the formal systems were performing well overall.

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[21] Until this stage, the documented evidence on IAIS had been generated incidentally from research into other topics. For example, Simon et al (1954) studied the merits of centralisation and decentralisation, and Hopwood's (1973, 1974) and Myers' (1970) research primarily concerned the behavioural implications of using accounting information for performance evaluation.

Based on the responses from the case study, a questionnaire was developed with the objective of assessing mid-level managers' attitudes towards formal and informal accounting systems. Of the usable responses 79 percent of the respondents indicated that they maintained some form of IAIS.[22]

While respondents held favourable views on both systems, the formal system was viewed more positively for 8 of 13 variables. However, the respondents reported that the informal systems:

- were easier to use than the formal system;
- were easier to understand than the formal system;
- more readily reflected the accomplishment of a manager's personal goals;
- were more accurate than the formal system; and
- more accurately reflected operating results.

The first three of the five variables listed above, indicate that informal information was perceived to be more relevant and practical to a manager for assessing his or her own, and his or her department's, performance. Significantly, there were only two variables contained within the questionnaire which concerned the relative accuracy of the informal and formal accounting systems. In both cases the managers questioned rated IAISs as being more accurate than their formal counterparts.

The variables were then subjected to a factor analysis which found that the formal and informal accounting systems were not substantially associated with each other on most variables.[23] The independence indicated that informal systems did not compete with, or attempt to supplant, the formal system but rather that they were complementary.

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22 Of 438 questionnaires sent, 156 were returned (a response rate of 35.6 percent) with 148 being usable (Clancy and Collins, 1979).

23 The only notable exception was where the managers believed that their success in the company was affected by reports from both systems, and that both systems were valuable because they reflected the accomplishment of organisational goals (Clancy and Collins, 1979).

Clancy and Collins concluded that IAISs were widespread, relatively efficient and effective and, most importantly, *"...should be considered a useful and necessary adjunct to the formal system rather than the unnecessary dissipation of resources"* (1979, p 29).

2.2.2. Lal and Donaldson

Lal and Donaldson (1988) examined the existence of informal systems and their relationship to formal systems in a New Zealand context. They stated that:

> *"The relationship is important because the informal system may process information that is vital to the organizational functioning but without formal records of that process" (1988, p 86).*

The research utilised semi-structured interviews with managers of two manufacturing companies. Of the managers interviewed, 56 percent stated that they maintained some form of IAIS. These systems were mostly unstructured (11 from 14) and simple, however three were structured and accordingly more complex. Exhibit 4.1 presents the contents of the informal systems and describes the relationship between the informal and formal accounting systems:

Exhibit 4.1: The Relationship of Informal Information Systems to Formal Information Systems[24]

Informal System	Relationship to formal system
Labour charges	Complements/Supplements
Union problems	Complements/Supplements
Efficiency	Complements/Supplements
Order book	Replaces
Order ledger	Replaces
Operations problems	Complements/Supplements
Efficiency	Duplicates
Machine breakdowns	Complements/Supplements
Project costs	Duplicates
Customers	Complements/Supplements
Production	Complements/Supplements
Responsible for costs	Duplicates
Explanatory	Complements/Supplements
Check accuracy of formal system	Complements/Supplements

[24] Adapted from Lal and Donaldson (1988, p 89).

As shown in Exhibit 4.1, the majority of systems (9 of 14) were found to complement or supplement the company's formal system. The research also indicated three instances where the IAIS was a duplication of information from the formal system and the first two examples of IAISs which effectively replaced a portion of the formal system.

Lal and Donaldson also questioned the managers as to the reasons why the IAISs were created and maintained. The manager's reasons are displayed in Exhibit 4.2.

Exhibit 4.2: Causes of Informal Information Systems[25]

Cause	Number of Cases
Defense mechanism	1
Help manage job better	2
Formal system too awkward to use	2
Responsible for cost (report not produced by formal system)	2
Explanatory purposes	1
Check accuracy of formal information	1
Help prepare report	1
Provide justification for capital expenditure	1
Keep check on efficiency of department	2
Need to do something if problems recur	1
Remember important information	1

As Exhibit 4.2 indicates the reasoning for the systems was diverse. Only four responses were mentioned by more than one individual. The responses ranged from purely personal reasons, such as a defense mechanism, to helping the manager perform his or her job better. However, most fitted the latter category with only the use of the IAIS as a defense mechanism being the obvious exception.[26] Hence, these findings confirmed Clancy and Collins conclusion that IAISs may benefit and not hinder an organisation. Notably, deficiencies in the formal system, awkwardness to use and responsible for cost, constituted 29 percent of the responses. Unlike Clancy and Collins' US research, poor formal information was a significant reason for an

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[25] Adapted from Lal and Donaldson (1988, p 90). Note that one manager supplied two reasons as to why he kept an IAIS. Therefore, the number of cases sums to 15 not 14.

[26] Depending on the context, justifying capital expenditure could also arise from managerial self-interest. Similarly, a cynical observer could say that by performing their job better, a manager is acting out of self-interest by enhancing their own future, remuneration and promotion prospects. However, even if this is the case, their actions likely to assist and not hinder the organisation.

IAIS in one of the two New Zealand companies examined. However, regardless of the underlying motivation, each area obviously warranted careful attention and was an important or troublesome area under the managers' control.

Lal and Donaldson concluded that IAISs served many useful purposes. The IAISs found were mainly unstructured and infrequently used. In most cases they supplemented/complemented the formal systems.

2.3. Summary

Research has shown that both managerial (Simon et al, 1954; Myers, 1970; Hopwood, 1973, 1974; Clancy and Collins, 1979; Lal and Donaldson, 1988) and non-managerial employees (Lupton, 1963), maintain informal accounting records for personal use. The systems contain both financial and non-financial information which either duplicates, replaces, or complement/supplements, information from the formal records. IAISs are maintained regardless of the effectiveness of the formal system. However, IAIS information is perceived to be more accurate than that produced by the formal system.

3. Implications of IAISs in Corporate Distress

3.1. For Employees

Employees may maintain, and therefore have access to, IAISs (Lupton, 1963). Depending on the relationship to the formal system and the type of information contained therein, two potential opportunities for employees to detect distress are offered. Firstly, the identification of inadequate formal accounting information, creative accounting and fraud. Secondly, the documentation of weaknesses within an organisation.

3.1.1. Inadequate Formal Accounting Information

Where the information contained is financial in nature, IAISs, which are perceived to be more accurate than formal accounting information, offer the potential to detect

financial manipulation and creative accounting in the official records, and indicate defective accounting systems. Defective formal accounting systems produce poor information which contributes to inappropriate managerial decisions. Inaccurate accounting information (Bibeault, 1982; Bahr, 1988), defective accounting systems and poor managerial decision-making contribute to an organisation's distress (Argenti, 1976a).

In the instances where the informal system effectively replaces part of a formal system, a weakness in the formal system is obvious. If the system was effective it would be used. Furthermore, in distress the information produced by a formal AIS may not be timely (Goodman, 1982; Kibel, 1982), accurate (Bibeault, 1982; Goodman, 1982), or may be too complex or overly simplistic (Bahr, 1988). Mintzberg (1975) proposed that defective accounting systems which produce information which is too late, too aggregated, untimely, and unreliable, cause managers to create IAISs. Hence, in distressed situations, IAISs are likely to exist, and the existence of an IAIS may indicate a defective accounting system which is a contributing factor to an organisation's distress.

IAISs offer the two other potential means to detect a poor formal accounting system:

- Firstly, some complementary/supplementary IAISs are maintained with the explicit purpose of checking the accuracy of formal information (Lal and Donaldson, 1988).

- Secondly, IAISs which duplicate the formal system could be used to verify the accuracy of the formal records.

A comparison between formal and informal records may reveal that the formal system is failing to record and produce accurate information. Furthermore, a comparison may indicate discrepancies and errors which arise from creative accounting and fraud, both of which have been posited as symptoms of corporate distress (Argenti, 1977). Substantial discrepancies or a defective formal accounting system may also mean that the financial information in annual reports may not accurately represent the firm's performance.

3.1.2. Organisational Weaknesses

The subject of an IAIS is an area of concern which requires more attention for the person maintaining it (Hopwood, 1973). Therefore, the area with the most potential for distress detection is when the IAIS provides additional complementary/ supplementary information for the employee's or manager's use.

A review of the nine areas reported as complementary or supplementary by Lal and Donaldson (1988), three, union problems, operations problems and machine breakdowns, explicitly concerned problems within an organisation. Maintaining information on these areas may reflect weaknesses in the company's operations because union disputes (Robb, 1986b), and problems which affect production (Bruno et al, 1987; Scherrer, 1988; Lingard, 1989) have been identified as factors which contribute to organisational distress.

Furthermore, two other IAISs, efficiency and production, concern the most vital aspect of the manufacturing organisations studied. Hence, IAISs may be established due to poor performance in, or the special attention demanded by, vital areas. Records containing data of the same or similar problems may signal potential distress or failure within a company. Furthermore, the information maintained in these areas may reveal a trend where the area of concern is either improving or worsening. Worsening performance in crucial areas such as efficiency and production could contribute to poor organisational performance and distress.

In these respects, IAISs could potentially be one of the informal information sources McBarnet et al (1993) referred to which led employees to identify financial and non-financial problems within a company.

3.2. For External Parties

Through keeping individual data on items not provided by formal records, employees may have unwittingly provided an alternative information source useful to assess an organisation's performance for external parties. For example, IAISs which are used to evaluate the accuracy of the formal system effectively fulfil the same role as an

internal audit. Where an internal audit function is perceived to be unreliable (or if it does not exist at all), these informal systems would provide a valuable check on the accuracy of the formal system. As New Zealand companies are commonly small to medium in size on an international scale, and are therefore unlikely to have internal audit functions, external auditors should pay particular heed to those informal systems that check the accuracy of the formal systems. Furthermore, if an external party, such as an auditor or banker, had access to these systems and a knowledge of corporate distress, they could potentially use the information to assist an assessment of whether an organisation was distressed.

3.3. Limitations

Accepting that the employees may not use information from the IAIS, there are four potential limitations regarding an employee's use of IAIS(s) for detecting distress:

- Firstly, not all the employees may have access to information from the IAIS;
- Secondly, the informal accounting information systems of a company are often small and restricted, and do not contain information from sources outside a single manager or employee's department. Therefore, a single IAIS will not provide alternative evidence of an entire organisation's performance.
- Thirdly, employees may not have access to the formal records to compare information.
- Fourthly, IAIS have, in past research, only kept management accounting information which is generated internally within the company. Management accounting information may differ from the financial accounting information which is the subject of creative accounting.

4. Conclusion

IAISs contain internal information of both a financial and non-financial nature which details problems and areas of managerial and employee concern within a single department. It is proposed that they could be used to detect distress in two ways.

Firstly, that an IAIS may indicate a defective formal accounting system which produces inaccurate information for managerial decision-making. Moreover, it is proposed that a comparison between informal and formal accounting systems could reveal discrepancies. Substantial discrepancies could indicate a defective formal accounting system or areas where fraud or creative accounting have occurred. Secondly, IAISs often detail concerns and weaknesses, such as union and operations problems, which contribute to distress.

Chapter 5

Observable Factors in Corporate Distress

1. Introduction

Research into company failure occurred as early as the 1930's (Fitzpatrick, 1931; Sadd and Williams, 1932; Smith and Winakor, 1935). Due to a successful business climate where the failure rate was low, it received little more attention until the late 1960's when the seminal works of Beaver (1966; 1968) and Altman (1968) were written (Argenti, 1977; Altman, 1983; 1984).[27] However, the US $5 billion collapse of Penn Central in 1970, and Rolls Royce ten months later, dispelled the myth that failure was the providence of small companies and inspired increased interest and research into corporate distress (Argenti, 1977).

Much of the subsequent distress research caused by these two collapses used methods and empirical techniques similar to those of Altman's (1968). However, there were exceptions, such as the works of Argenti (1976a) and Miller (1977) which sought to identify the factors which caused distress. These two divergent techniques have remained fundamentally unchanged until the present day.

This chapter presents the differing methods used in prior failure research. It then continues, outlining prior qualitative research which details the factors that previous researchers posit are the observable causes, or symptoms, of distress and eventual failure. Lastly, the limitations of this approach are presented.

2. Corporate Failure

The failure of an organisation is not a rapid event but rather a process which occurs over a period of time (Argenti, 1976a; Sharma and Mahajan, 1980; Bruno and Leidecker, 1988; Young, 1989; Bortiz, 1991; Greatorex, Holden, Iliffe, and Wauchope, 1994). Although its approach is heralded by symptoms (Argenti, 1976a;

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[27] During the 1930 to 1970 period, research was also performed by Merwin (1942) and Tamari (1966). However, it is the works of Beaver and, in particular, Altman, which others such as Deakin (1972), Edmister (1972) and Blum (1974), used as a basis for their research.

Cohn, 1985) or signals (Bortiz, 1991), the underlying causes of failure occur at a much earlier stage (Smith, 1963; Argenti, 1976a; Honsberger, 1979).

The failure process has led some researchers, such as Robertson (1984), Robb (1986b), and Altman (1988), to compare company failure to human illness. Altman commented that:

> *"Just as a sick person often has certain symptoms that enable his physician to diagnose his disease, a firm is very likely to display signs of deterioration before its ultimate failure" (1988, p 40).*

Like a physician, researchers have attempted to detect distressed or potentially failing companies. To do so they have predominantly utilised two differing approaches which Argenti (1977) classified as the analytic, (or mathematical), method and the list method.

3. Prior Research into Corporate Distress

3.1. The Analytic Method

The analytic method focuses on ways to classify bankrupt and non-bankrupt firms using financial ratios. Quantitative in nature, it is characterised by the univariate ratio analysis approach of Beaver (1966, 1968), and the multivariate approach of Altman's Z-Score (1968), and Altman, Haldeman and Narayanan's ZETA analysis (1977).

Put simply, the analytic approach involves using linear discriminant analysis (eg Altman, 1968), or another statistical technique, to analyze the financial ratios of a sample of failed and matching non-failed companies. The equation developed from the independent variables (the financial ratios) establishes a cut-off point (Jones, 1987). Firms which fall below the cut-off point are expected to become bankrupt. Firms above the point are classified as non-failed and are expected to continue operating successfully (Jones, 1987).[28]

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[28] A very simplified example of the analytic approach has been presented. While the essential method remains the same, differing statistical analyses such as logit (Martin, 1977; Ohlson, 1980; Gentry, Newbold and Whitford, 1985; Casey and

The results of such research indicated that the financial signs of company failure may be evident up to five years prior to a company failing. For instance, Altman et al's (1977) ZETA analysis, which combined seven financial variables, classified over 96 percent of firms correctly one period prior to failure and 70 percent correctly five reporting periods prior to collapse.

3.2. The List Method

The second approach is qualitative in nature. Self-described by Argenti (1977) as the list method, it 'lists' observable factors that researchers posit cause, or are signs of, financial distress. Both Argenti (1977) and Bruno and Leidecker (1988) assert that it is the identification of both causes and symptoms which makes qualitative research better for understanding a company's failure.[29] As Bruno and Leidecker assert:

> *Failure can be better understood through analysis of both the underlying causes and performance indicators that identify symptoms of eventual demise. The financial modeling approach is useful for predicting the likelihood of failure, but does not identify the causes of that failure (1988, p 53).*

These causes and performance indicators are predominantly derived from case studies (Smith, 1963; Ross and Kami, 1973; Boocock and Drozd, 1982). However, personal experience (Hartigan, 1973, 1976; Cohn, 1985; McQueen, 1989a, 1989b), and interviews with such people as company founders (Bruno et al, 1987; Bruno and Leidecker, 1988) and receivers or accountants (Argenti, 1976a; Young, 1989; Greatorex et al, 1994) have also been used to identify factors in failure.

The list approach is typified by Argenti's (1976a) research, in which he proposed ten factors which caused, contributed to, or were symptoms of, failure. These factors were categorised as defects, mistakes and symptoms, and were subsequently formed into the A-Score list (Argenti, 1977).[30]

Bartczak, 1985; and Zavgren, 1985), probit (Zmijewski, 1984), and recursive partitioning (Frydman, Altman and Kao, 1985) have been utilised. However, a more detailed examination of this method is beyond the scope of this thesis. For an overview of the techniques and limitations of the methods used in analytic bankruptcy prediction, see Zavgren (1983), Zmijewski (1984) and Jones (1987).

29 While qualitative and list style research offer explanations of company failure, they also have numerous weaknesses which will be presented later in this chapter.

30 The A-Score list is presented on p 59 of this thesis.

3.3. Other Methods

Recently, Hambrick and D'Aveni (1988) categorised distress research into *three* areas:

- Financial ratios (Altman, 1968; Altman, 1982);
- Anecdotal (Argenti, 1976a); and
- Qualitative (Daughen and Binzen, 1971; Starbuck, Greve and Hedburg, 1978).

The financial ratio approach corresponds to Argenti's mathematical or analytical approach, while qualitative refers to the in-depth examination of single or multiple cases of company failure.

Anecdotal refers to the lack of methodological rigour which Argenti (1976a) used to derive his list. Much of his work was unsupported assertion with scant evidence. However, this does not necessarily mean Argenti's work is incorrect because it has many similarities to the qualitative research of Miller (1977) among others. Furthermore, other researchers such as Robertson (1984), and Keasy and Watson (1987) have applied parts of his list and found that they were useful in predicting failure.

Buttery and Shadur (1991) also identified three major categories of research into distress: the analysis of financial standing of firm (Altman, 1968); research which captures the main features of collapse trajectories (Argenti, 1976a); and case studies of specific companies. However, individual case studies, which Hambrick and D'Aveni (1988) termed qualitative research, could also be categorised under the mantle of the list method, as they often highlight weaknesses which caused a company to fail (eg Lawson, 1982; Lee, 1982; Robertson, 1984; Robb, 1985; Robb, 1986b; Buttery and Shadur, 1991), and have been used as a basis to delineate common factors in distress (Miller, 1977).

3.4. The Distress Approach Adopted for this Research

The present research seeks to ascertain whether employees' are aware that an organisation is distressed prior to its failure, and investigate the observations and concerns which caused that awareness. Therefore, only the qualitative or list approaches which identify observable factors in corporate failure are relevant in assessing the employees' perceptions. The following section details the models of failure proposed by Argenti (1976a) and Miller (1977), and derives a list of individually observable factors from previous list and qualitative research.

4. Differing Distress Models

4.1. Argenti

Argenti (1976a) believed that corporate failure was a process consisting of three distinct phases which he termed defects, mistakes and symptoms. As shown in Exhibit 5.1, defects cause mistakes which in turn lead to observable symptoms. Therefore, a company without defects does not make mistakes and, as a consequence, does not fail (Argenti, 1986a).

Exhibit 5.1: The Failure Process[31]

Defects →	Mistakes →	Symptoms
Management (6)	Leverage	Financial
Accounting (3)	Big Project	Non financial
Response to Change	Overtrading	Creative Accounting
		Nose Dive

Within some of the factors, Argenti identified more than one problem. For example, he identified six management defects and three accounting defects. Included in

[31] Argenti (1976c, p 14).

management defects were such deficiencies as autocratic leadership, non-participating boards of directors and imbalanced skills amongst senior management and directors (Argenti, 1976a). Similarly, the financial symptoms could be detected through the use of a variety of ratios, and non-financial symptoms could range from offices needing a coat of paint to low morale amongst the employees.

According to Argenti, a single observation of a defect, mistake or symptom should not be enough to cause concern but the observation of several defects and mistakes would indicate that an organisation was distressed. To assist in the application of the factors Argenti (1977) formed the A-Score in which distress factors were listed and assigned a weighting based on the severity of the issue (refer Exhibit 5.2).

The list identified elements common to companies of all sizes. However, Argenti posited that there were three different organisational types, each of which failed in differing ways. These failures were graphically depicted as failure trajectories. Typically referred to as Types 1, 2 and 3 (Argenti, 1976a), they were alternatively termed the stillborn company, the meteoric company and the mature company (Argenti, 1976c).

4.1.1. The Failure Trajectories

4.1.1.1. Type 1: The Stillborn Company

Typically these are small companies run by one person who knows how to manufacture a product or deliver a service but has few accounting or marketing skills (Argenti, 1976a). Due to their lack of financial skills, the initial forecasts prove to be wrong with sales targets not being met. Therefore, the owner cannot met debts as they fall due. Furthermore, he or she cannot refinance because the company was originally overgeared, so he or she mistakenly overtrades in an attempt to raise cash to pay expenses. During the life of the company, losses, or minimal profits, are made and cash flow is non-existent. Most Type 1 companies fail within a few years of incorporation.

While Type 1 companies were never successful, Type 2 companies are the opposite (Argenti, 1979a).

Exhibit 5.2: Argenti's Scorecards for the A-score[32]

	Maximum Weighting 1977	1984
Defects		
Management		
1. Autocratic chief executive.	-0.50	8
2. The chief executive is also the chairman.	-0.30	4
3. The skills on the board are unbalanced.	-0.15	2
4. There is no strong finance director.	-0.15	2
5. Most board members do not actively participate in big decisions.	-0.15	2
6. No depth of professional management below the board.	-0.15	1
Accounting		
1. There is no budget or budgetary control system.	-0.20	3
2. There is no cash flow plan - if there is, it is out of date.	-0.20	3
3. There is no costing system	-0.20	3
Response to change		
Company exhibits clear and vital example of failing to respond to change.	-1.00	15
Total for Defects	-3.00	43
Mistakes		
Leverage		
The company's capital gearing or income gearing is noticeably high.	-1.00	15
Overtrading		
The turnover is rising at a much faster rate than profits or cash flow.	-1.00	15
Projects		
The company has launched a project of such a size that if it goes wrong it will more than exceed any possible cash available from all sources.	-1.00	15
Total for Mistakes	-3.00	43
Symptoms		
Financial signs		
The traditional ratios will deteriorate and cash will be extremely scarce. The share price will fall versus the index.	-0.25	4
Creative Accounting		
The accounts will show signs of window dressing to "improve" profits.	-0.25	4
Non-financial signs		
The office needs painting, quality and morale falls, etc.	-0.25	3
Nose-dive		
It becomes impossible to hide the last-gasp scramble for cash.	-0.25	1
Total for Symptoms	-1.00	12
Grand total for A-score.	**-7.00**	**100**

[32] The differing weightings are found in Argenti (1977, p 52) and (1984, p 15).

4.1.1.2. Type 2: The Meteoric Company

The meteoric company is led by an entrepreneur who has a great deal of business expertise and acumen. The company starts small then undergoes rapid expansion. The early success of a Type 2 company draws public attention. Feeling such attention the CEO attempts to keep the company growing at the same phenomenal rate through overtrading.

During this time the entrepreneur continues to control the company, even though he or she cannot do so effectively due to its increasing size, and the company makes all six of the management defects. While turnover continually increases, profits do not. This lack of success is disguised through creative accounting. Then an event happens which stalls the company's progress, such as an unsuccessful product or change in the business environment. The event causes a loss in confidence from creditors and investors. As confidence plummets, the media, banks, and stockmarket also become concerned that the company is distressed. Despite reassurances and creative accounting, the loss of confidence continues and the company collapses a short time later.

The collapse of these companies is rapid (Argenti, 1979a) and often occurs in a blaze of publicity (Argenti, 1976c). Most last as long as a decade but some may only survive for 2 or 3 years (Argenti, 1976b). Conversely, the third failure trajectory involves a company that has existed and been successful for a considerable period of time.

4.1.1.3. Type 3: The Mature Company

Like the meteoric company, the mature company is dominated by a single person (Argenti, 1976b). However, in this case the autocrat does not change the organisation to meet the requirements of a changing market and environment, preferring to stay with the strategy and products which proved successful in the past. As a result, the company's sales, profitability and cash flows decline. Low cash flow causes gearing to rise as debt is acquired to meet expenses.

After these initial problems, the company reaches a plateau where its performance stabilises. The autocrat attempts to launch the company from the plateau by using debt to finance a new project, or overtrading. The failure of these efforts causes the failure of the financially frail company (Argenti, 1979a).

4.2. Miller

Miller (1977) analysed 31 variables for each of 42 cases with the objective of grouping organisations into recurring forms of failure. He found that 85 percent of the cases were incorporated in one of four 'archetypes.' Two of the archetypes, failure syndromes 1 and 2, are similar to Argenti's (1976a) Type 2 and 3 failure trajectories, respectively.

4.2.1. Failure Syndromes

4.2.1.1. Failure Syndrome 1: The Impulsive Syndrome: Running Blind.

According to Miller:

> *"[t]he F_1 firms fail because they are dominated by a power-hoarding chief executive and because their strategies are over-ambitious, incautious, and oblivious to some every important features in their environment" (1977, p 45).*

Bold decisions and rapid expansion overtaxes the firm's financial and managerial resources. During this period the CEO neglects to delegate power or consult with middle management, and the organisation's information systems fail to keep pace with the company's increased size. The inadequate information, and lack of other managerial input, results in poor strategies and decisions, and poor control of problems which ultimately results in failure.

4.2.1.2. Failure Syndrome 2: The Stagnant Bureaucracy.

The stagnant bureaucracy, like the impulsive syndrome, is dominated by a power hoarding CEO who ignores advice from other management. However, in this case, the firm is not young and expanding, but old and well established and used to operating in a stable environment. These companies ignore external environmental changes, preferring to stay with status quo as that has proven successful in the past.

Due to the autocratic CEO, a lack of management information, and a bureaucratic system whereby policies and rules are followed automatically, the organisation fails to change and consequently fails to remain competitive.

4.2.1.3. Failure Syndrome 3: The Headless Firm.

Miller states that *"[t]he F_3...companies are usually large and quite diversified, and important changes in markets have occurred recently"* (1977, p 48). The headless firm does not suffer from autocratic leadership but instead has a leadership vacuum with the CEO being a figurehead only. The CEO fails to respond to the market changes, or any opportunities, nor does he or she co-ordinate the organisation's various departments. The firm's information systems are also faulty and fail to produce the information required to control the organisation's diverse operations. Consequently, the firm is slow to adapt to changing conditions, there are no clear strategies, and the departments operate as independent units which conflict with one another.

4.2.1.4. Failure Syndrome 4: Swimming Upstream: The Aftermath.

This firm has been harmed by past failure *"...perhaps from being in an F_1, F_2, or F_3 mode for an extended period"* (Miller, 1977, p 49). As such, it is debatable whether this syndrome is truly independent. Instead, it should be viewed as an extension of the three other syndromes which explains their final collapse.

After a period of prolonged distress a new CEO and executive management team are appointed. They are unfamiliar with the industry but decide that drastic action is required to turn the company around. However, they fail to obtain support from the company's employees making any changes more difficult to undertake. The new management institutes a number of policies and objectives, but, due to the company's depleted resources, poor market position, or outdated plant and equipment, such a drastic manoeuvre consigns the company to a rapid demise. In this instance the failure to understand the company combined with a new bold strategy results in failure.

After proposing these failure syndromes, Miller also presented a list of warning signs to use when assessing whether or not a company is distressed. Some of these factors, such as a power-hoarding chief executive, over-extension of financial resources, and a commitment to old products and markets, are similar to factors proposed in Argenti's (1976a) list. The corresponding problems in the A-Score would be an autocratic CEO, overgearing, and a failure to change. Therefore, Miller's research provides a deal of evidence on the accuracy of Argenti's list and failure trajectories which have received criticism for a lack of methodological rigour.

However, while Argenti's (1976a) and Miller's (1977) classification of failures are consistent in some respects, they are presented as stereotypes. The list of factors each determined, differs. Furthermore, other researchers have found factors not covered by either Argenti's or Miller's general approaches which employees could potentially observe. The following section presents many of the common elements in distress but is by no means definitive.

5. Common Factors in Corporate Distress

Elements which cause the distress and eventual failure of a company can originate both internally and externally to an organisation (Starbuck, Hedburg and Greve, 1978; Sharma and Mahajan, 1980; Scherrer, 1988).

5.1. Internal Factors

5.1.1. Management and Executive Function

The most important determinant of any organisation's performance is its management. As Altman remarks:

> *Usually, a bankruptcy can be traced to some kind of managerial incompetence and the Penn-Central case is certainly no exception (1971, p 153).*

As indicated in Table 5.1 bad management or managerial incompetence is the single most recurring feature cited in distress literature.

Table 5.1: Poor or Inexperienced Management as an Underlying Cause of Company Failure

Sadd and Williams, 1932	Dun and Bradstreet, 1981
Smith, 1963	Altman, 1983
Lippitt and Schmidt, 1967	Landesburg and Edmunds, 1983
Dun and Bradstreet, 1969	Argenti, 1986a
Altman, 1971	Rolph, 1988
Hartigan, 1973	Scherrer, 1988
Willis, 1975	Scherrer, 1989a
Argenti, 1976a	Scherrer, 1989b
Argenti, 1976b	Young, 1989
Argenti, 1976c	Bortiz, 1991
Hartigan, 1976	Cohn, 1991
Miller, 1977	Makridakis, 1991
Hays, 1977	Hambrick and D'Aveni, 1992
Abdelsamad and Kindling, 1978	Mukerjee, 1993
Starbuck, Greve and Hedburg, 1978	Greatorex et al, 1994
Sharma and Mahajan, 1980	

The recurring nature with which poor management is reported as contributing to failure should be unsurprising for a company's management makes the strategic decisions and it is their reaction to internal (Scherrer, 1988; Mukerjee, 1993), and external (Robb, 1986a; Scherrer, 1988; Mukerjee, 1993), events that determines an organisation success (Lippitt and Schmidt, 1967).

While inadequate or bad management had previously been identified as the primary cause of distress, Argenti (1976a) noted that the behaviour which constituted it had not been defined. He proposed six areas of concern, the first and most important being the autocratic leader.

5.1.1.1. Autocratic CEO or One Man Rule

An autocratic CEO dominates an organisation and his or her colleagues, hoarding power and making decisions without listening to advice (Argenti, 1976a). Initially proposed by Argenti (1976a) and reaffirmed by Miller (1977), the role of an autocrat in company failure has found acceptance with other authors such as McKinlay (1979), Boocock and Drozd (1982), Makridakis (1991), and Mukerjee (1993).

One man rule does not necessarily consign a company to failure (Argenti, 1976a). However, by not having to reach consensus with his or her colleagues, the autocrat may be more susceptible to making mistakes (Argenti, 1976b, 1986a) and more willing to take risks (Mukerjee, 1993). The potential to make mistakes compounds as an organisation's size and complexity increase, making it more difficult for a single person to control (Lippitt and Schmidt, 1967; Miller and Toulouse, 1986).

An autocrat is more likely to dominate the organisation where the supporting executive team is weak or unbalanced. Therefore, autocratic leadership is a particular problem when an organisation also exhibits one or more of following six management defects. However, it must be noted that the following defects are also problems within their own right.

5.1.1.2. The Chairman is also the CEO

An independent chairman could censure the CEO's actions, limit his or her autonomy, or dismiss him or her for their performance (Argenti, 1976c, 1979b). However, a CEO who is also the chairman is unlikely to dismiss, or discipline, themself.

5.1.1.3. Unbalanced Top Team

The top team includes directors, senior executives and advisers (Argenti, 1976a). It is unbalanced where the preponderance of these people have skills in the same area, such as engineering or marketing. Without a wide variety of skills at the top, the chances of a threat appearing and going unnoticed is increased (Argenti, 1976a). An unbalanced top team is particularly common in small companies where the management team is small (Abdelsamad and Kindling, 1978).

5.1.1.4. Weak Finance Function

Closely associated with a lack of skills in the top team, a weak or non-existent finance manager means the top team does not have its attention drawn to any emerging financial difficulties (Argenti, 1979b). Therefore, they may be unaware of financial issues involved in, or consequences of, a decision.

5.1.1.5. Inactive Board of Directors

A board of directors may not play an active part in decision making, preferring to leave it all to the CEO (Argenti, 1976c, 1979b). Inactivity may be caused where the board members are inexperienced. Inexperience was found by Greatorex et al (1994) to be significant weakness in large, medium and small failed companies. Alternatively, the board or top management team may believe they play an active role in decision making but be guilty of 'group think' and follow blindly where the CEO leads (Makridakis, 1991).

5.1.1.6. Lack of Management Depth

While Argenti (1976a) mentioned lack of management depth as a defect, he was unsure of the influence it had on the collapse of a company. However, it is a factor which recurs in small company failure where size precludes development of managers (Abdelsamad and Kindling, 1978).

5.1.1.7. Failure to Take Enough Interest in the Business

In the case of Stirling Homex reported in Business Week (1972) the managers failed to take interest in the company's production and instead focused on marketing hyperbole. Furthermore, they used the company to fund their own expensive lifestyle. Similarly, executives of struggling companies have been noted as lending themselves interest free loans from company funds (Barnard, 1988).

While poor management is a recurring factor it is not confined to failing companies (Dunn, 1986). For a company to fail other factors must also occur. One of the foremost is inadequate accounting information.

5.1.2. Inadequate Accounting Information

Distressed companies often have inadequate accounting information systems (Argenti, 1976a; Altman, 1983; Scherrer, 1988; Altman and La Fleur, 1989) which produce poor management information (Smith, 1963; Argenti, 1976a; Boocock and Drozd, 1982; Greatorex et al, 1994). Poor quality information contributes to poor

managerial decision-making and may also obscure the position of a company, making distress undetectable to any party except top management (Argenti, 1976a).

The three most common accounting weaknesses which have been found to contribute to failure are:

- Poor or non-existent budgets (Argenti, 1976a; Argenti, 1979b; McKinlay, 1979; Lingard, 1989). Without a comparison of organisational performance against some budget or standard, deficiencies can not be detected (Argenti, 1979b).

- Deficient costing systems (Hartigan, 1973, 1976; Argenti, 1976a, 1976c; Lingard, 1989; Greatorex et al, 1994). Where costing systems are inadequate, production expense may be underestimated and selling prices set too low (Hartigan, 1973; Scherrer, 1988).

- Inadequate cash flow forecasts (Argenti, 1976a; Abdelsamad and Kindling, 1978; Argenti, 1979b; McKinlay, 1979; Lingard, 1989; Greatorex et al, 1994). Without anticipating when cash expenses will occur, and providing cash to meet those expenses, an organisation may become insolvent (McKinlay, 1979).

While most weaknesses in accounting information are associated with small and medium sized companies (Greatorex et al, 1994), specific deficiencies such as inadequate cash flow forecasts may contribute to a lack of financial management which is an element common to failures regardless of the size of the company.

5.1.3. Financial Management

Two of the most common recurring themes in distress are poor cash flows and overleveraging/undercapitalising. Both are examples of poor financial management and contribute greatly to the failure of organisations.

5.1.3.1. Cash flows and Operating Cash Flows

Both empirical (Gentry, Newbold and Whitford, 1985; Dambolena and Schulman, 1988; Giacomino and Mielke, 1993) and non-empirical research (Houston, 1972; Perry, 1982; Platt, 1985; Robb, 1985, 1986b; Fredenberger, DeThomas and Ray,

1993) indicates cash flows are a critical for organisational survival.[33] Without cash, an organisation can not meet its expenses (Perry, 1982; Robb, 1986b). However, it must be noted that poor liquidity is not a cause of failure, only an indicator of problems which must ultimately be attributed to management (Willis, 1975) who may misunderstand or ignore cash flows (Houston, 1972; Lee, 1982).

Cash flows are generated through a variety of means, including issuing share capital, selling assets, raising debt and selling goods and services. Of these forms cash flows from operating activities, roughly calculated as cash sales less cash expenses incurred to produce those sales, is particularly important.[34] Operating cash flows signal the success of the organisation's trading activities (Lawson, 1982; Robb, 1985). Without generating cash flows from operations, a business will have to continuously borrow to survive (Lee, 1982).

Lee (1982) and Robb (1986a, 1994) posit that it is the cumulative lack of operating cash flows over time which is a determining factor in failure. Where operating cash flows fail to met cash disbursements over a prolonged period, other sources of finance, such as debt, are required. Continuous borrowing will increase leverage and interest expense. A cyclical effect ensues whereby interest payments need to be met through continual refinancing or borrowing. While this strategy may be sustained in the short-term, in the long term such a strategy will not succeed as creditors will not advance further money when the company becomes overleveraged.

5.1.3.2. Overleveraging/Overgearing

Gearing or leverage refers to the proportion of an organisation's assets funded by debt. Overleveraging arises from an heavy reliance on debt (Abdelsamad and

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[33] Early research by Beaver (1966), Altman (1973), Altman et al (1977), Sharma and Mahajan (1980) and Mensah (1983) have also found 'cash flow' based ratios significant. However, care must be taken when referring to such findings. In each of the above studies, cash flow was defined or approximated as income plus depreciation which Robb (1985) correctly describes as a measure of working capital.

[34] Empirical evidence on the usefulness of operating cash flows as a predictor of distress are divided. Casey and Bartczak (1984) and Gombola, Haskins, Ketz and Williams (1987) found that ratios involving cash flow from operations proved to be an inaccurate predictors of bankruptcy. Conversely, the empirical research performed by Gentry, Newbold and Whitford (1985) found that the dividend cash flow component was a significant indicator of distress. They commented that *"...failing firms tended to experience a shortfall in inflows from operations, which forced a reduction in dividend payments"* (1985, p 52).

Kindling, 1978; Williams, 1984; Greatorex et al, 1994) or initial undercapitalization (Hartigan, 1973, 1976; Small Business Reports, 1982; Robb, 1985; Lingard, 1989; Cohn, 1991; Greatorex et al, 1994). If a company is overgeared any misfortune, ranging from management error to an economy wide economic downturn, can cause an organisation to fail to meet its interest payments or debt covenants (Argenti, 1976a). Creditors seeing this may lose confidence and choose to place the organisation into receivership.

Once again overgearing is the result of poor financial management, and is caused by management ineptitude or overoptimism (Argenti, 1976a). This problem is compounded if there is a weak finance adviser who cannot inform his colleagues as to the seriousness of the situation (Argenti, 1979b).

Just as poor gearing and cash flows are interrelated, two of the other mistakes proposed by Argenti (1976a), overtrading and the big project, will only cause an organisation to fail if it is already overleveraged (Argenti, 1976a, 1979b). These two factors can be categorised as organisational expansion. However, both are also directly attributable to management error.

5.1.4. Managerial Mistakes

5.1.4.1. The Big Project

Loosely defined by Argenti as *"...any undertaking or obligation that is large compared to the resources of the company"* (1976a, p 134), the big project could be a new product, merger, diversification, technological leap forward, or anything new which is on a large scale (Argenti, 1976c, 1979b). Such projects are characterised by managerial optimism which is supported by an initial underestimate of costs and overestimation of revenues (Argenti, 1976a).

While not termed the big project by other researchers, large scale expansion from a poor financial base is a characteristic of many business failures (Birchfield, 1972 - JBL; Robertson, 1984 - Laker Airways; Robb, 1985 - PSIS; Robb, 1986b - Mosgiel Ltd; Buttery and Shadur, 1991 - Bond Corporation). Such mistakes are normally

associated with large companies (Greatorex et al, 1994), or companies striving to restart, (Type 3), or continue, (Type 2), rapid growth (Argenti, 1976a).

Argenti's broad definition allows many elements to come under the heading of the big project. Some of which may include:

- Diversification into non-core or incompatible activities (Smith, 1963; Robb, 1985; Makridakis, 1991; Greatorex et al, 1994);
- Ambitious or high priced acquisitions (Greatorex et al, 1994);
- Investments in managerial ego (Greatorex et al, 1994); and
- Technological or product innovation, especially where products or technologies are introduced which are not economically viable (Makridakis, 1991).

5.1.4.2. Overtrading

"A company is said to be 'overtrading' when its sales turnover rises faster than its profits" (Argenti, 1979b, p 5). As an organisation overtrades, production increases. More cash is tied up as inventory and accounts receivable meaning a short term supply of funds is often needed (Lingard, 1989). These funds are typically debt. If leverage is high then the borrowing and interest repayments can cause insolvency, particularly where sales or profitability reduce (Argenti, 1976c, 1979b; Robertson, 1984). Furthermore, companies which overtrade may loosen their credit policies meaning bad debt levels increase which also may contribute to failure. This is a particular problem in small firms where it is asserted that as little as 10 percent of debtors need turn 'bad' to cause a company to fail (Young, 1989).

Robertson and Mills state that *"[a] company cannot be accused of overtrading simply because it is increasing its stocks or its fixed assets"* (1991, p 42). However, increased stocks and fixed assets are two indicators of overtrading which, when seen in conjunction with increasing sales without commensurate increases in profits, may indicate distress.

5.1.4.3. Inappropriate Structure and Strategy

Amongst the other managerial mistakes which contribute to failure are adopting a poorly conceived strategy and an inappropriate organisational structure.

5.1.4.3.1. Strategy

In the pursuit of success management may adopt a strategy which is poorly conceived (Makridakis, 1991) or inappropriate (Smith, 1963). Inappropriate strategies may involve taking excessive risks, such as the aforementioned big project and overtrading, which are an important component in failure (Makridakis, 1991).

In the pursuit of differing strategies managers may lose sight of their original purpose of the company (Abdelsamad and Kindling, 1978; Boocock and Drozd, 1982; Small Business Reports, 1982). This is a particular problem for small companies who, by attempting to expand, lose their niche market and consequently fail to serve their original customers requirements. Furthermore, expansion typically involves competing against larger companies who have an advantage of scale (Abdelsamad and Kindling, 1978).

5.1.4.3.2. Structure

Failing companies often have an organizational structure which is inappropriate for the size or type of the company (Smith, 1963; Boocock and Drozd, 1982; Small Business Reports, 1982). Decentralisation is often a key element in crisis with companies adopting it without the necessary controls or structure (Smith, 1963; Boocock and Drozd, 1982). Similarly, centralisation must also suit a company's style (Smith, 1963).

The structure of an organisation should change as organisational size increases (Small Business Reports, 1982; Buttery and Shadur, 1991). Therefore, small companies should adopt a conservative structure because, by overstructuring, they may constrain their employees' performance (Small Business Reports, 1982), and, due to inflexibility, find it difficult to respond to environmental change (Smith, 1963).

5.1.5. Production and Marketing

Lastly, production and marketing problems have been identified by Bruno et al (1987), Lingard (1989) and Scherrer (1988) as internal elements which contribute to failure. Often overlooked, production problems include machine breakdowns and manufacturing poor quality products (Lingard, 1989).[35] According to Lingard (1989, p 1) *"[t]he causes range from technical defects or inefficient procedures to bad labour relations."* Production problems can lead to expensive, poor quality products which can not be sold profitably (Lingard, 1989).

The marketing function must sell the product. To do so it must identify the correct market for that product, or establish whether there is a market at all (Scherrer, 1988; Lingard, 1989). Furthermore, the marketing function must determine the size of the market as over-production of a product which cannot be sold consumes financial resources which in turn may contribute to insolvency and receivership.

5.2. External Events

Often general economic events and industry specific events seem to initiate a company's decline. Each of these will be discussed in turn.

5.2.1. General Economic Events

Khandwalla (1982), Rose, Andrews and Giroux (1982) and Platt and Platt (1994) found that a change in general economic factors is an important component in an organisation's decline. Economic factors which influence failure include:

- Government influence and government imposed restrictions (Hartigan, 1976; Boocock and Drozd, 1982; Milburn et al, 1983; Scherrer, 1988; Lingard, 1989);
- The performance of the stock market (Altman, 1983; Scherrer, 1988);

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[35] Deteriorating product quality is mentioned by Argenti (1976a) as a non-financial symptom of distress.

- Money supply or credit availability (Altman, 1983; Scherrer, 1988; Greatorex et al, 1994);

- Inflation, which, for example, may impact on production considerations (Scherrer, 1988); and

- Reduced economic growth or economic downturn (Sharma and Mahajan, 1980; Boocock and Drozd, 1982; Altman, 1983; Williams, 1984; Scherrer, 1988; Altman and La Fleur, 1989; Makridakis, 1991; Greatorex et al, 1994; Platt and Platt, 1994).

While the extent to which these general environmental factors affect a company may differ according to its industry and individual characteristics, all organisation's will be affected in some way. The only exception in the above list is where a government imposes restrictions which only affect specific industries or groups of industries, such as import tariffs or quotas.

5.2.2. Industry Specific Events

Events and changes within an industry also contribute to collapse. For instance Dunn reported that:

> *"[h]igh interest rates, low export commodity prices, a depreciating currency and drought in the rural community have contributed to record business failures during 1986" (1986, p 100).*

A drought is an industry specific factor which will predominantly affect primary sector companies. Commonly mentioned industry specific factors include:

- Competition (Hartigan, 1976; Boocock and Drozd, 1982; Milburn et al, 1983; Scherrer, 1988; Lingard, 1989; McQueen, 1989a; Makridakis, 1991). Ignoring or underestimating competition can lead to failure because existing and new competitors attempt to gain market share or other competitive advantages at the expense of successful, profitable firms (Makridakis, 1991). Technological changes may also allow new competitors into a market by changing its boundaries (Makridakis, 1991).

- Suppliers (Milburn et al, 1983). Just as the failure of a large company can create a domino effect whereby small to medium sized companies may enter into receivership after a debtor fails (Dunn, 1986; Young, 1989; Buttery and Shadur, 1991), the failure of a crucial supplier may also contribute to corporate distress (Robb, 1986b). The term 'suppliers' refers to those people supplying land, labour and capital to an organisation (Milburn et al, 1983). Therefore, included in this term are the labour disputes mentioned by Hartigan (1976) and Robb (1986b).

- Natural environmental events such, as droughts, floods and storms (Milburn et al, 1983; Dunn, 1986);

- Changes in public taste (Willis, 1975; Hartigan, 1976; Sharma and Mahajan, 1980; Milburn et al, 1983; Scherrer, 1988); and

- Technological change (Hartigan, 1976; Boocock and Drozd, 1982; Scherrer, 1988; Makridakis, 1991).

While environmental events are a factor in distress they are rarely the underlying cause. Instead it is how management reacts, or fails to react, to the change such events cause in the environment which is the important determinant of organisational success or failure (Argenti, 1976a). For example, the 1980's saw a period of easily available credit which CEO's believed would continue (Greatorex et al, 1994). When the economy went into recession, credit tightened and companies which relied on debt financing struggled (Greatorex et al, 1994).

5.2.3. Change

Houston identified obsolete products and services as an indicator of an organisation which is heading toward failure and asserted that *"...no company, especially a young one, can make a go of it without some innovative product or service"* (1972, p 59). However, he recognised that an innovative product may soon become outdated so continued innovation or product renovation was required to maintain success.

Later, Argenti (1976a) stated that failing to respond to competitive trends, political change, economic change, and changes in society and technology, was a defect

which caused failure. However, he noted that this factor was only important in the old, established organisations represented in the Type 3 failure trajectory (Argenti, 1979b, 1979c). In such companies, obvious signs of a failure to change were outdated machinery, poor employee relations, a lack of computer applications, and the failure to use marketing techniques (Argenti, 1986b).

Alternatively known as organisational arteriosclerosis (Makridakis, 1991), the failure to respond to environmental change as identified by Houston (1972), Argenti (1976a) and Makridakis (1991) is an important factor in the failure of many organisations. However, events causing change need not be external to an organisation.

Robb proposed commercial life events, defined as *"...those occurrences which change the status quo under which an entity has operated, necessitating adaptive efforts by the entity to attain homoeostasis"* (1986b, p 7), as important indicators of distress in a company. The 23 events, which are presented in Exhibit 5.3, were classified into three categories which incorporated internal and external change:

- *"Category A: those involving people within the entity,*
- *Category B: those involving business activities,*
- *Category C: those involving the economic environment" (Robb, 1986b, p 8).*

Robb found that the number of life events increased as failure approached. As the findings were derived from a single case their generalisability is limited.

However, many of Robb's life events have gained support from other research, such as that by Gilson (1989, 1990) into management and director turnover, and from the variety of environmental changes mentioned earlier. As such, life events emphasise the influence of change in failure.

Exhibit 5.3: Robb's Life Events[36]

Category	Life Event
Category A	1. Unexpected death of an executive 2. Resignation of an executive 3. Dismissal of an executive 4. Unexpected death of a director 5. Resignation of a director 6. Appointment of an executive 7. Appointment of a director 8. Industrial dispute with employees
Category B	9. Loss of existing agency 10. Insolvency of supplier 11. Company involved in litigation 12. Insolvency of major debtor 13. Termination of a part of entity's operations 14. Expansion into new geographical market 15. Expansion into new products/services 16. Delays in commencement of new project/ equipment 17. Acquisition of a subsidiary
Category C	18. Attempted or successful takeover of business 19. Change in major shareholding 20. Change in foreign exchange rates 21. Change in government taxes/tariffs/duties 22. Natural disaster affecting part of operations 23. Entry of a major competitor

5.2.3.1. Failure to Identify or Respond to Change

Several reasons have been posited as to why managers do not respond to change or fail respond to change in an inappropriate manner. The first three have elements of over-optimism which has been identified as an important reason why managers do not respond adequately to a crisis (Abdelsamad and Kindling, 1978; Makridakis, 1991; Small Business Reports, 1982):

- Managers may underestimate the effect of economic events (Abdelsamad and Kindling, 1978). This loss of touch with the environment may be partially due to

[36] Adapted from Robb (1986a, p 9).

poor management information. However, as we have seen, this is also a defect of management origin.

- Managers may procrastinate, treating any problem as temporary in the hope it will vanish (Smith, 1963; Scherrer, 1988). For example, poor performance by a firm in crisis is often rationalized by managers as being caused by external factors such as economic recessions, competitors and the like (Starbuck, Greve, Hedburg, 1978).

- People are unwilling to admit a firm is in trouble (Argenti, 1977; Cohn, 1985). Managers are no exception. Instead of responding they may try and conceal problems from everybody including themselves (Argenti, 1977).

- Managers may simply ignore the warning signals (Abdelsamad and Kindling, 1978; Boocock and Drozd, 1982).

- Where managers attempt to respond to a crisis they may remedy the symptoms and not underlying causes (Scherrer, 1988). When the problem worsens, management may freeze and not be able to respond (Boocock and Drozd, 1982).

5.3. Symptoms of Distress

The previous pages outlined the events which cause organisations to fail. However, there are also four categories of observable symptoms which an organisation exhibits in its last few months prior to failure (Argenti, 1976a). Those symptoms are creative accounting, financial and non-financial symptoms, and the nose dive.

5.3.1. Creative Accounting

Argenti asserts that *"[i]f a company is failing it will be using creative accounting; if a company is using creative accounting it is failing"* (1976c, p 13). While the embodied assertion is strong, it cannot be said that every company which distorts its financial position through creative accounting is failing, an organisation in crisis may resort to adopting such practices (Argenti, 1976a; Boocock and Drozd, 1982; Schwartz, 1982).

Creative accounting may occurs for two related reasons. Firstly, it may be used as a means to protect the company until the problem is solved or disappears of its own accord (Argenti, 1980). Secondly, managers may attempt to suppress or control publicly available information in annual reports to favourably reflect their own performance (Salamon and Smith, 1979; Kluger and Shields, 1989). In some instances this control can amount to misrepresentation (Salamon and Smith, 1979).

5.3.1.1. Fraud and Misrepresentation

Fraud is often anecdotally attributed as a cause of company failure (Hartigan, 1973, 1976; Cohn, 1991). Hartigan (1973, 1976) reports that fraudulent activities have involved stealing from a company or establishing a company for illegal purposes (Hartigan, 1973). However, recent research by Greatorex et al (1994) found that receivers believe fraud is not a major factor which causes failure. Rather the reverse is more common. Instead of causing failure, organisations may use fraudulent means to create profits and prosper (Seidler, Andrews and Epstein, 1977).

The use of fraudulent means to overstate the company's financial position is an indicator of distress (Argenti, 1976a). However, fraud is only likely to be undertaken by the managers of a severely distressed organisation who have already used other, non-fraudulent means to favourably depict the organisation's performance. One such way is by changing accounting policies.

5.3.1.2. Changing Accounting Policies

The management of an organisation in crisis may changes its accounting practices (Starbuck, Greve and Hedburg, 1978). Research by Schwartz (1982) has found that distressed companies have been found to change their accounting policies more often than non-distressed companies. Such changes can improve the financial position and performance of the organisation (Schwartz, 1982), or draw attention away from a poor cash flow position (Robb, 1985). Examples of accounting policies changed during distress include inventory valuation methods (Schwartz, 1982) and the criteria for capitalising of expenses (Robb, 1985). Other means of creative accounting include revaluing assets to unrealistic levels (Argenti, 1976a), reducing expenditure

on maintenance and repairs, and selling assets to a third party and then leasing them back.

5.3.1.3. Other Indicators of Creative Accounting

Robb submits that:

> *"It is not always clear what is 'creative accounting' given the imprecision of basic accounting concepts such as financial position, assets, liabilities, and funds from operations" (1986b, p 5).*

Furthermore, where it occurs, creative or fraudulent accounting practices are difficult to detect. However, there are two potential indicators of creative accounting; the changing of an external auditor and lateness of financial statements.

- Change of External Auditor (Schwartz and Menon, 1985; Kluger and Shields, 1989). A company's managers may attempt to make undisclosed changes in accounting methods or other means to better reflect the organisation's financial position (Kluger and Shields, 1989). Where the auditor disallows such changes, a different auditor may be appointed.

- Lateness of financial statements (Argenti, 1976a; Lawrence, 1983; Whittred and Zimmer, 1984; Robb, 1986a; Keasy and Watson, 1987). Delays may be caused by weaknesses of a company's formal accounting system which, means more time is required to prepare the accounts and for client/auditor negotiation (Whittred and Zimmer, 1984).

5.3.2. Financial Symptoms

5.3.2.1. Financial Ratios

The analytic approaches adopted by Altman (1968) and Altman et al (1977) have indicated that the financial position of failed and non-failed companies differs dramatically before failure. Therefore, the distress or failure of an organisation maybe detected by calculating financial ratios. This can be performed by calculating data from several years to detect any trend. Ratios may also be compared to industry average ratios. However, it must be remembered that creative accounting and

environmental influences such as inflation can distort the accounting information from which the ratios are prepared (Argenti, 1976a).

5.3.2.2. Financial Position

Even without calculating financial ratios, an examination of the data contained in annual reports could yield useful information. For example, Giroux and Wiggins (1984) found that:

> *"...the events most closely associated with bankruptcy are net losses, debt accommodation, and loan default. Indeed, almost all failed firms experienced combinations of these three events within 2 years prior to bankruptcy" (1984, p 179).*

Net losses were especially prevalent with each of the 22 firms suffering a net loss within two years of bankruptcy. Many of these losses were the company's first. Giroux and Wiggins (1984) also noted that dividends were eliminated by 59 percent of failing firms. Such obvious indicators as net losses, and dividend elimination, can be detected by reading annual reports.

5.3.3. Non-financial Symptoms

Failing firms also display non-financial indicators of distress. These are many and varied and differ from case to case. For example, non-financial symptoms may include: poor product quality; offices in need of paint; neglected repairs; reduced market share; and suppliers becoming suspicious and restricting delivery (Argenti, 1976c). While it is obvious that not all organisations which have neglected repairs will fail, non-financial factors should not be ignored as they provide additional evidence of distress.

One recurring non-financial symptom is low employee morale (Argenti, 1976a; Scherrer, 1988, 1989b). Morale has been noted to be the domain of the grapevine (Davis, 1953b; Arnold, 1983; Esposito and Rosnow, 1983; Simmons, 1986; Mishra, 1990; Garnett, 1992; Hull, 1994; Wells and Spinks, 1994) with employees gleaning information from it in times of crisis. Therefore, this interrelationship would again suggest the grapevine has a role in distress with employees gaining information on their own and the company's future from it.

A second common non-financial symptom is management turnover, which is more likely to occur in distressed firms (Gilson, 1990; Hambrick and D'Aveni, 1992). For instance, Gilson (1989) found that 52 percent of senior managers leave distressed firms in any given year compared to 19 percent for non-distressed companies. Furthermore, after a period of distress such as debt restructuring or bankruptcy, only 46 percent of incumbent directors and 43 percent of CEOs remain with a company (Gilson, 1990).

The managers who leave a distressed company are likely to have more prestige than those who replace them (D'Aveni, 1990). A reduced level of management prestige may in turn cause creditors to withdraw their support, thus aggravating the distressed position of the organisation (D'Aveni, 1990). Therefore, the departure of senior management or directors, particularly where such departure is sudden or unexplained (Robb, 1986a, 1986b), may indicate distress within an organisation.

5.3.4. Nose Dive

Described as the nose dive, during the last few months of an organisation the symptoms become more severe and difficult to hide (Argenti, 1976a). By this stage:

> *"...virtually everyone who is closely connected with the company, creditors, customers, employees and so on, know that something is wrong but even now may refuse to accept that the worst may be about to happen" (Argenti, 1976c, p 15).*

It is the sudden deterioration which occurs in the last few months which people commonly associate with the failure of an organisation, not realising that the underlying causes of failure may occur up to ten years earlier.

5.4. Summary

Organisational failure originates with poor management. Poor management manifests itself with mistakes such as choosing an inappropriate strategy, overtrading, embarking on an especially ambitious project, and overleveraging the organisation, and is exacerbated by ineffective accounting information. However, even making these mistakes a company may survive until there is an unanticipated

change in its external environment. Again, it is how management responds to that change which determines an organisation's success. By this stage, the organisation begins to display several symptoms of distress. After a period of time, the company's struggle to survive becomes obvious, a rapid decline occurs to the level where the company is unable to continue operating or is precluded from operating by its creditors.

6. Limitations

The use of a list style approach has numerous weaknesses, not the least of which is the vast number of diverse factors identified as causing, contributing to, or signalling corporate distress.

6.1. Diversity of Factors Identified

As is evident from the preceding pages, there is a multitude of factors which can contribute to the failure of an organisation. Often factors proposed by one researcher are not evident in the generic list approach or the research of other company failures.

Organisational age and size has been indicated as a reason for such differences with Argenti (1976a) differentiating between the failure paths of small-young (Type 1), large-young (Type 2) and large-old companies (Type 3). Each organisation displayed a different combination of list factors.

A second reason could be differences between industries. For instance, Bruno et al (1987) assert that different attributes are required to be a successful Silicon Valley firm than other firms. The differences arise due to the difficulties of producing equipment in an industry characterised by a changing market and rapid technological advances. Bruno et al's (1987) findings included industry specific environmental factors, undercapitalization, debt problems and an ineffective team, which were also mentioned by Argenti (1976a) and various other researchers. However, Bruno et al (1987) reported that cultural/social factors, personal problems, one-track thinking, problem with the venture capital relationship and over-reliance on one customer were also reasons for failure. These reasons are not apparent in other research.

Both Argenti's (1976a) and Bruno et al's (1987) research indicates that failing company's may exhibit different characteristics. The list method only identifies the common elements in the majority of failures. Argenti acknowledged that a list approach has this limitation, stating that *"...many [companies] will fail without even displaying any of the signs at all and never having moved down any of the three trajectories"* (1976a, p 168).

As factors presented earlier are only those commonly mentioned in a wide variety of studies, the case of an individual company may display numerous reasons for failure which have not been mentioned.

6.2. Disagreement over Factors

Researchers also disagree as to whether some factors do contribute to failure. Disputed factors include:

- Product and manufacturing problems (McKinlay, 1979);
- Inability to attain financing (McKinlay, 1979);
- Fraud (McKinlay, 1979; Greatorex et al, 1994);
- Bad luck (Greatorex et al, 1994); and
- Failure to move with the times (Greatorex et al, 1994).

The above factors have been proposed as contributing to failure by authors other than those referred to above, (the listed authors state that these factors did not contribute to failure). Again, the differences may be due to differences in individual cases. However, they may also be attributable to confusion as to which factors cause failure, as opposed to those that apparently cause failure. This is illustrated by Landesburg and Edmunds (1983) who attribute 95.6 percent of failures to managerial shortcomings. In the same cases the apparent causes of failure were inadequate sales 41.3 percent and heavy operating expenses 46.9 percent (Landesburg and Edmunds, 1983).

6.3. Research Methods

Discrepancies may also be attributable to differences in the research method used to determine the factors. Argenti's (1976a) work has been criticised for its lack of empirical evidence, as he used predominantly anecdotal evidence as the basis for his assertions (Keasy and Watson, 1987). However, research by Miller (1977) and others has provided empirical evidence which supports Argenti's assertions. Furthermore, parts of Argenti's (1976a) list have been applied and found to be evident in other failed companies (Robertson, 1984).

This chapter has included the common elements from list style research and other factors which can potentially be observed in a failing company. Consequently, no distinction was made between empirically derived research, such as that of Gilson (1989, 1990) and Hambrick and D'Aveni (1992), anecdotal evidence (Argenti, 1976a), and qualitative research (Starbuck, Hedburg and Greve, 1978). Often the sources relied on nothing more than their own observations and experiences when identifying factors which cause distress (Hartigan, 1973, 1976; Williams, 1984) or the analysis of a single case (Lawson, 1982; Lee, 1982; Robertson, 1984; Robb, 1985, 1986a). However, while a variety of sources have been used, only the common elements identified from all of the various research styles have been presented. The resulting overview indicates that there are many common factors mentioned, regardless of the rigorousness, or lack thereof, of the research method.

6.4. Observation

The list approach relies on the ability to observe the factors. In many instances observation is difficult. For instance, the defects which lead to failure, such as management and accounting inadequacies, are internal to an organisation, making observation by an external observer difficult (Robb, 1986b). However, such a problem may be potentially negated by an insider within a company, such as an employee.

6.5. Judgement

Lastly, the list method is judgemental and relies on a skilled, experienced person, such as a banker, analyst, consultant or professional non-executive director, to interpret the situation (Argenti, 1977). Despite any levels of experience and skill, the approach is difficult to use for three reasons:

- Firstly, the importance of list factors relative to one another is unknown. For instance is overtrading more important than an unbalanced board or poor financial information?

- Secondly, where a factor is observed, a subjective judgement has to be made as to its severity (Robertson, 1984). Without a reference point to compare the factors, such judgement is difficult to make.

- Thirdly, there is no indication of how many factors are required before an organisation must eventually fail (Sharma and Mahajan, 1980).

Argenti (1977, 1984) realised such difficulties and consequently assigned weightings to his list to form the A-Score.[37] The weightings were skewed so that early factors were rated more highly than later factors. Through such an approach Argenti (1976a) indicated that the observation of defects and mistakes, which cause failure, was important for the early detection of distress. Moreover, the severity of each factor could be varied within the range based on the perceived severity in that situation. For example, using the 1977 version of the A-Score:

> *"If one [company] scores as much as -1.0 you should be worried. If one scores -3.0 I would guess that means that only a major operation will save the company" (Argenti, 1977, p 50).*

This quote again indicates the weakness of the approach; even after applying the weightings, it substantially relies on guess-work and subjective judgement.

Other than Argenti (1976a), few have attempted to delineate an individual factor's contribution to failure. Bruno and Leidecker (1988) classified reasons for failure as

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[37] Argenti's (1977) A-Score list was presented on p 59 of this thesis.

either major or minor. Greatorex et al (1994) asked respondents to indicate the extent to which the factors contributed to failure. However, only a three point scale was used. Furthermore, while Greatorex et al's (1994) findings tend to support Argenti's (1977) weightings they did not determine any process of failure. Therefore, the authors did not indicate whether there are differences in the importance of factors in the process in relation to one another; neither did they indicate whether the importance of the factors varies over time. Other researchers tend to ignore the problem and instead refer to any factors identified as absolutes, which provides no indication at all as to the relative importance of the factors.

7. Conclusion

The list approach to distress attempts to determine which factors cause, contribute and are symptoms of distress. Prior research indicates that companies primarily fail due to poor management. It is management's role to respond to internal and external factors which affect a company.

There are a variety of general economic and specific industry events which affect an organisation. Such factors include government restrictions, technological advances, increased competition, and economic recessions. In the face of such events management often make internal errors such as adopting an inappropriate strategy, overtrading or launching a big project. This is potentially fatal to an organisation which is in a poor financial position due to mismanagement. In the years just prior to failure, distress can be observed through the deterioration of financial ratios, and non-financial symptoms such as poor morale, and production problems.

Chapter 6

Research Method

1. Introduction

The dual objectives of this thesis are to ascertain the extent to which employees can detect distress prior to a company's failure, and whether their observations are influenced by information from informal sources. While these objectives involve establishing whether employees believed Fortex was distressed prior to its collapse, the examination will extend further as employees may have obtained informal information relating to events that they did not identify as contributing to the collapse but which have been identified as important factors in corporate distress research. Hence, examining the objectives involves three processes, which are:

- Investigating whether former Fortex employees believed the company was going to collapse before it was placed into receivership.
- Ascertaining the employees' pre-collapse opinions, observations and concerns and comparing them to factors that are reported as causing, or indicating, distress in a company.
- Establishing which whether the former Fortex employees used information from the IAISs and the grapevine to form their opinions, observations, and concerns regarding the company's operations.

The research was conducted as a case study, and predominantly utilised evidence gained from semi-structured interviews.

This chapter presents and discusses the reasons why a case study was the appropriate technique for the research undertaken in this thesis. Contained within it is an overview of the purported advantages and disadvantages associated with using both a case study and interviews, and an outline of the means used to minimise the possible effect the method's limitations. This chapter also documents the site and interviewee sample selection processes.

2. The Case Study Method

Case studies have been described as a naturalistic approach to research as they involve the observation of phenomena in their natural setting (Abdel-khalik and Ajinka, 1979). After the phenomena are observed, theories are derived to explain the analysis of the data (Abdel-khalik and Ajinka, 1979). In this respect, the case study method is different from 'traditional scientific research' which *"...is characterized by systematic manipulation and collection of data, control over extraneous variables, and hypothesis testing"* (Abdel-khalik and Ajinka, 1979, p 29). Due to this difference the case-study method has been criticised, and until recently, been rejected as a non-scientific or a poorer research method (Yin, 1989; Bailey, 1992). However, many of these criticisms are unjustified as case studies have numerous benefits and are an appropriate research method in certain situations.

A case study is defined by Yin (1989, p 23) as:

> *"...an empirical enquiry that: investigates a contemporary phenomenon within its real life context; when the boundaries between the phenomenon and context are not clearly evident; and in which multiple sources of evidence are used."*

This definition encompasses two important strengths of case study research; its use of a variety of data collection methods and the examination of the phenomena in their natural context. However, it fails to identify that case-studies are particularly useful in exploratory research where the objective is to generate hypotheses and theories, and add to a field's knowledge (Mitchell, 1983; Emory and Cooper, 1991). Hence, case studies have several strengths, but like any research method, they also have inherent weaknesses which make them more appropriate in some situations than in others. The following section outlines these strengths and then presents an analysis of why those features made a case study the ideal method for the present research.

3. Strengths

3.1. Full Contextual Analysis

By examining phenomena in their natural environment (Yin, 1989; Birnberg, Shields and Young, 1990; Merriam, 1990), case studies provide a level of detail or richness beyond that which can be obtained from laboratory (Kaplan, 1986) or survey research (Hägg and Hedlund, 1979). This detail allows the researcher to obtain an overview of the complexity of the situation from which the phenomena arose (Hägg and Hedlund, 1979; Otley and Berry, 1994).

Without this contextual approach, any understanding of the causes, and meanings, of a phenomenon is limited as the researcher is restricted to looking for predetermined traits or variables. In so doing, they may disregard other factors which may have contributed to, or caused, the phenomenon (Hägg and Hedlund, 1979; Merriam, 1990).

3.2. Examination of Social Phenomena

A contextual analysis is particularly beneficial where the research examines a social phenomenon. In these instances the traditional scientific approach, which utilises such tools as experiments and surveys, is inappropriate because it:

> *"... does not pin down in an exact way the nature of the analytical elements in the empirical social world nor does it ferret out in an exacting manner the relation between these analytic elements" (Blumer, 1978, p 41).*

Therefore, traditional research does not provide the researcher with any understanding of the social interrelationships which form an important component of many phenomena.

3.3. Hypothesis Generation

Full contextual analysis of a case allows is provides fertile ground for generating insights which other methods, such as survey and experiments, would not provide (Morgan, 1983). For instance, a case may generate hypotheses by making formerly

obscure theoretical connections apparent (Mitchell, 1983).[38] Merriam asserts that *"[t]hese insights can be construed as tentative hypotheses that help structure future research; hence, case study plays an important role in advancing a field's knowledge base"* (1990, p 32). Therefore, case studies can be used as a basis to generate hypotheses and build theories (Hägg and Hedlund, 1979; Morgan, 1983; Reid, 1987; Emory and Cooper, 1991; Bailey, 1992; Ferreira and Merchant, 1992). As a result they are a useful exploratory tool in a field where there is little prior research (Yin, 1989).

3.4. Researcher Benefits

Because case studies allow the researcher to examine an event within the environment which it occurred, the researcher derives some benefits:

- Firstly, they can directly observe the data themselves through interviews and examination of documented evidence (Merriam, 1990). Therefore, the researcher is forming a view from the actual situation and evidence, not an abstracted or artificial situation as in an experiment, or evidence out of context, such as in a survey.

- Secondly, the researcher has the ability to adapt to situations encountered (Yin, 1984). The researcher can therefore *"... respond to a situation by maximising opportunities for collecting and producing meaningful information"* (Merriam, 1990, p 37). Consequently, any areas of interest which arise can be examined further, and the researcher can even change the focus of the study when unexpected factors or phenomena are revealed.

- Thirdly and lastly, through personal communication and contact, a rapport can be established with the subject or subjects which may allow the researcher access to

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[38] Such a case is provided by Beveridge (1953) who relates how a chance observation of flies congregating around urine passed by a dog without a pancreas, led to the discovery of the connection between the pancreas and diabetes. However, such a connection was only possible because the observer was able to perceive the contradiction in the material which did not explain why the flies congregated (Mitchell, 1983).

sensitive knowledge that other methods such as surveys or experiments do not gather (McKinnon, 1988).

Therefore, in an exploratory field where unexpected factors and phenomena may arise, and which also depends on personal contact to establish people's views and opinions, the benefits the case study method provides to the researcher would indicate that a case study is appropriate.

3.5. Variety of Data Collection Methods

Unlike many other research methods, in case research, data can be collected in a variety of ways (Bonoma, 1985; Kaplan, 1986; Yin, 1989). The different types of data collection methods include:

1. Documentation
2. Archival Records
3. Interviews
4. Direct Observation
5. Physical Artifacts
6. Participant observation (Yin, 1989; Emory and Cooper, 1991).

The use of multiple sources *"...permit[s] the verification of evidence and avoidance of missing data"* (Emory and Cooper, 1991, p 143), thereby assuring an accurate representation of the full context in which events occur.

3.6. Internal Validity

Multiple methods and an analysis of a phenomenon within its natural context allows the identification of many, if not all, of the factors which affect the phenomena being

studied (Yin, 1989; Merriam, 1990). Hence, case studies normally have high internal validity.[39]

3.7. Other Benefits

3.7.1. Longitudinal Study

Case studies may be conducted longitudinally (Emory and Cooper, 1991). Unlike other research methods, a single case used in such a way can examine events over a period of time. Longitudinal case studies are particularly useful for identifying variables which contributed to a phenomenon in the past, but which may not exist at the single point in time in which an alternative method, such as a survey, takes place.

3.7.2. Subject Participation

Lastly, and importantly, the subject of a case study is likely to receive the benefits that accrue from the research, therefore giving them an incentive to participate (Birnberg et al, 1990). However, this is their only incentive to cooperate. A case study will only be successful if the participants perceive that the benefits are enough to warrant their time and effort (Birnberg et al, 1990).

4. Applicability of the Case Study Method

A case study's strengths are apparent in certain areas:

- Firstly, they are appropriate where a full contextual analysis and a volume of detailed information is required.
- Secondly, they are especially useful where the subject examined is a social phenomena or requires analysis in a social context.

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[39] Abdel-khalik and Ajinka define internal validity as the *"...measure of the extent to which variation in the dependent variable can be really attributed to (or said to be caused by) variations in the independent variable included in the study - that is, how valid is the inference that causality exists"* (1979, p 33).

- Thirdly, they can be used to derive hypotheses and theories in areas of scant previous research.

- Lastly, they provide the researcher with three distinct benefits and a variety of data collection methods which ensure an accurate representation of the phenomena being studied and high internal validity.

The requirement for these strengths is apparent when an analysis of the present research is undertaken.

The majority of previous research into the grapevine (Davis, 1953a, 1953b; Walton, 1961) and IAISs (Myers, 1970; Hopwood, 1973, 1974; Lal and Donaldson, 1988) has been conducted as single or multiple case studies. Moreover, the qualitative corporate distress approach adopted in this thesis had also predominantly used case study or field study research to discern factors which cause collapse. Furthermore, the research objectives examined in this research were developed from a pilot study where a potential interrelationship between employees detection of distress and informal information was revealed. The successful use of the case study method in previous research into the individual aspects researched in this study, and in the pilot study, provided an initial indication that the case study research method would be applicable to the research to be undertaken in the present study.

The author has been unable to find any *research* which examined the IAIS, the grapevine or employees' observations, in a distress context. Chapter 2 reported that Argenti (1976a), Altman (1983) and McBarnet et al (1993) had each provided examples of events which employees may observe. Implicit within Argenti's claims was that employees' observations were restricted to the non-financial symptoms of distress. However, McBarnet et al (1993) reported that employees may detect creative accounting. Creative accounting is a symptom of distress. However, it is not a non-financial symptom.

The lack of any prior research establishing the events which employees may observe in a distressed company, and the anomaly between Argenti's claims and McBarnet et al's findings, means that this research could not be restricted to focus on a specific

part of the failure process. For example, by focusing on non-financial symptoms, the research may have failed to identify where employees observe and recognise other issues such as Argenti's (1976a) mistakes and defects. Moreover, as employees' observations and ability to assess distress in an organisation were previously unresearched, the secondary objectives of assessing whether employees observations are influenced by information from an IAIS and/or the grapevine was devoid of any previous research.

Without previous research in the specific areas of study, and because the IAIS and the grapevine lacked a comprehensive body of knowledge, the research undertaken in this study was exploratory in nature. Case studies are ideal for exploratory research (Yin, 1989) and provide a basis to generate hypotheses and theoretical connections (Mitchell, 1983). Furthermore, adopting a case study allows the researcher flexibility to adapt to any situations encountered (Yin, 1989; Merriam, 1990). This was perceived as an especially beneficial aspect because the previous literature was both scant and anomalous, thereby increasing the possibility of unexpected factors or phenomena arising.

A case study was also considered appropriate because the research conducted in this thesis is an examination of a social phenomena. Grapevine communication is a function of personal and social relationships (Davis, 1954). Furthermore, the research examines employees' observations and opinions which are influenced by other employees and the company's environment.

The analysis of a collapse also relies of the context in which the company operates and derives meaning from the surrounding environment. Therefore, this study required the examination of the research questions in a way by which the natural social context of the phenomena could be assessed. Even though Fortex no longer existed, a case study using interviews allowed the interviewer to enquire about the circumstances which surrounded their observations. Hence, the interviewees' responses included a contextual component which could not have been provided by an alternative method such as a survey. Without this contextual analysis, the conclusions could fail to depict the true situation, and vital information and interrelationships may be omitted (Hägg and Hedlund, 1979; McKinnon, 1988).

4.1. Other Research Alternatives

4.1.1. Experiment

Because the research sought to examine a single example of a social phenomena which had ceased to exist, an experiment was not considered as an appropriate alternative.

4.1.2. Survey

The exploratory nature of the present research, and the inability to focus on one specific part of the distress process, precluded the adoption of a survey as an appropriate research tool. To assure all the employees' concerns and observations of factors in distress were covered, a questionnaire would have had to cover the multitude of potential factors proposed in the qualitative distress research. Due to this requirement a questionnaire approach was considered infeasible for three reasons:

- Firstly, a survey would be inordinately long to cover even the majority of the events which the employees' may potentially have observed.
- Secondly, while the failure of an organisation has many common elements, each organisation has differences which vary according to the context in which it operates and which may not be accounted for in previous research. Hence, in Fortex's failure employees may have recognised problems not contained within the questionnaire.
- Thirdly, an employee is most unlikely to be familiar with many of the technical terms used in distress research. Therefore, an employee may be unaware that his or her observation coincided with one of the factors listed in the questionnaire.

One potential alternative would have been to utilise the reasons for failure proffered by external parties, such as the media, to form part of a survey.[40] This alternative would have avoided the problems detailed in point one above. However, this approach would not counteract any unfamiliarity with distress terms and could potentially exacerbate the second weakness, as the employees, from their inside position, may have observed markedly different events or problems which external parties, such as the media, had not.

The research undertaken in this study was also exploratory. A case study is best suited to exploratory research because it analyses phenomena in context and could potentially identify other variables, which due to its restrictive nature, a survey could not assess.

5. Weaknesses

Having established that a case study was an appropriate research method, consideration was accorded to the criticism the method has received. For example, the research was not devoted to aimless exploration and hypothesis generation, but also sought to examine whether the case provided supporting evidence for the interrelationships derived from earlier studies. However, hypothesis testing is one of many areas for which a substantial number of researchers assert that the case study is inappropriate. The criticism even extends to internal validity which is a purported strength of the case study method.

Yin (1989) lists construct validity, internal validity, external validity, and reliability as characteristics good research must exhibit. Case studies have received criticism in each of these four areas. The following section outlines and examines the justification of these purported weaknesses. Included are the measures undertaken to reduce the possible effects of the weaknesses which are relevant to this research.

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[40] These opinions are covered in detail in Chapter 7, Fortex's Story, p 115.

5.1. Construct Validity

Construct validity involves *"establishing correct operational measures for the concepts being studied"* (Yin, 1989, p 40). Case studies have been criticised for failing to meet this criteria because, in many situations, measures for the focus of a case study are not developed. Instead researchers rely on their own subjective judgements to collect data (Yin, 1989).

To ensure construct validity the researcher should:

> *"(1) Select the specific types of changes that are to be studied (in relation to the original objectives of the study), and*
>
> *(2) Demonstrate that the selected measures of these changes do not indeed reflect the specific types of changes that have been selected" (Yin, 1989, p 42).*

The objectives of this research, employees' observations and concerns in a distressed company, whether observations are influenced by informal information, the method of assessment of the phenomena, and a comparison of observation with factors proposed in qualitative corporate distress research, have been explicitly stated. However, there are also three more possible options to increase construct validity. These are:

- using multiple sources of evidence;
- establishing a chain of evidence; and
- having a draft of the case study reviewed by key informants (Yin, 1989).

The author endeavoured to use documented and archival records as evidence to complement information from interviews, and utilised a key informant, Union Secretary Mr Peter Binnie, to examine the interpretation of events. This should provide increased, but not assured, construct validity.

5.2. Internal Validity

Internal validity, as defined earlier,[41] involves establishing whether the independent variable(s) cause the dependent variable to occur, and is purported to be a strength of case studies. However, critics have questioned this claim and have indicated five weaknesses which impinge on any case study's internal validity (Lee, 1989). These areas are:

a) causality and control;

b) observer bias;

c) observation caused effects;

d) data access limitations; and

e) respondent biases (Merriam, 1990).

5.2.1. Control Over Variables and Causality

It is difficult, if not impossible, to control the variables in case studies (Abdel-khalik and Ajinka, 1979; Kaplan, 1986; Kerlinger, 1986; Lee, 1989; Birnberg et al, 1990; Otley and Berry, 1994). Therefore, cause and effect are nearly impossible to establish (Lee, 1989; Bailey, 1992). Hence, the researcher may not be able to distinguish between the effect of the independent variables studied and other variables in the environment. As this study is retrospective in approach, this problem is accentuated because internal validity is also threatened when the researcher infers that an event resulted from some earlier unobserved occurrence (Yin, 1989).

While it is undeniable that there is a low level of control over variables in case study research, there are some tactics, similar to those used to increase construct validity, available to the researcher to combat such a problem. The researcher can use multiple sources of evidence, increase the amount of time spent on the case site, and

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[41] The definition is presented in footnote 39, p 94 of this thesis.

observe the social behaviour in the setting (McKinnon, 1988). As outlined earlier, the author endeavoured to use multiple sources of evidence. The other two methods are impractical because the entity no longer exists.

5.2.1.1. Hypothesis Testing

Due to the difficulty of controlling variables, case studies have traditionally been viewed as appropriate only for hypothesis generation, not hypothesis testing (Hägg and Hedlund, 1979; Kaplan, 1986). However, case studies can be used to test hypotheses (Katz, 1953; Reid, 1987; Sykes, 1990; Ferreira and Merchant, 1992). For example, under Popper's (1962) view of scientific progress, where one contrary observation can refute a theory, case studies provide an ideal means for hypothesis testing. Hence, case studies can test hypotheses and lead to the progression of scientific knowledge. They are not restricted to being a device for hypothesis generation.

5.2.2. Observer/Researcher Bias

In a case study, the researcher is the primary instrument for gathering and analysing data (Merriam, 1990). As such the research itself is open to human fallibilities, with the researcher potentially making mistakes, missing opportunities and introducing personal biases into the research (Merriam, 1990). Of these three human weaknesses, researcher bias is often viewed as a case study's greatest pitfall (Bailey, 1992).

Researcher bias primarily results from the researcher's preconceived notions or expectations (Bailey, 1992). As researchers have different backgrounds, training and experience of the phenomena under investigation, they *"...come complete with a unique set of biases which mean that the way in which an event is seen, interpreted and recorded may differ from one observer to another"* (McKinnon, 1988, p 38). These personal biases can be introduced into the research through interviews, conversations, the analysis of documentation, and field notes made immediately after an event has occurred (McKinnon, 1988). Interpretations made from biased data yield incorrect conclusions.

Unfortunately researcher bias cannot be avoided (McKinnon, 1988). Instead, a researcher must try to step away from preconceived notions (Bailey, 1992), and take measures to protect against them as much as possible. One such way is to discuss research design and interpretation with colleagues (Bailey, 1992). The research design was discussed with the author's supervisor. Furthermore, to avoid the biases introduced in field notes, all the interviews conducted were audio-taped and fully transcribed. The transcriptions were used as the basis for the results.

5.2.3. Observation Caused Effects

Researcher observation can affect the phenomena being studied by causing participants to change their behaviour (Birnberg et al, 1990). If this occurs, the researcher will not be observing the phenomena in their natural setting (Simon and Burnstein, 1985). Hence, the validity of the conclusions drawn would be suspect. Such a problem was noted as the Hawthorne effect.[42] No direct observation will be undertaken in the present study. However, even interviews, which are the primary means used in this research to gather information, can introduce observation effects which alter the natural environment.[43]

5.2.4. Data Access Limitations

Data access limitations occur in two ways. Firstly, the researcher is only on the site for a limited time and cannot see earlier or later events (McKinnon, 1988). Therefore, the researcher has no way of establishing whether the observed events were typical. Secondly, the researcher's hosts may limit access to documents, events, people and places to the extent that the researcher is studying less than the complete phenomena (McKinnon, 1988).

Data access limitations could be a particular problem for this thesis when the researcher attempts to gain a variety of evidence, much of which may no longer exist

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[42] An account of the Hawthorne studies is contained within Roethlisberger and Dickson's (1939) *Management and the Worker*.

[43] This problem is covered in the Interview Bias section, p 108 of this thesis.

since the company itself no longer exists. Moreover, with the continuing court case concerning alleged fraudulent activities by CEO, Graeme Thompson, and financial controller, Michael Mullen, the employees may be reluctant to provide information. The potential lack of a variety of evidence will be somewhat negated with evidence gained from interviews being verified by reference to other interviews.

5.2.5. Respondent Biases

In many cases the actors may be hesitant or not reveal truthfully what actually occurs in the organisation (Beed and Stimson, 1985). Therefore, any information gained could be inaccurate, making the findings incorrect and lowering the internal validity of the research.

While hesitancy may be difficult to avoid in a typical situation when comments may lead to recriminations from the employer or entity involved, in this situation the company has failed, so the employees should have the ability to speak openly and freely. The second problem, that of revealing the truth, will be somewhat negated with:

a) the use of multiple sources of evidence;

b) conducting enough interviews so that discrepancies between interviewees' responses can be identified; and

c) the use of follow up interviews.

However, some risk of respondent error will remain.

5.3. External Validity/Generalisability

External validity is the extent to which findings of one study are generalisable to other situations (Abdel-khalik and Ajinka, 1979; Yin, 1989; Merriam, 1990). Critics of the method argue that because of the uniqueness of a single case study, any attempt to generalise is invalid (Hägg and Hedlund, 1979; Lee, 1989; Birnberg et al, 1990; Flagg, Hale and Glover, 1992; Spicer, 1992; Otley and Berry, 1994). However, these authors are referring to statistical generalisation, which is

inappropriate when applied to case studies which do not use random sample selection but instead select and study a specific phenomena for interest and the generation of new ideas (Yin, 1989; Merriam, 1990).

Instead, due to the large contextual component of the research, case studies are analytically or theoretically generalisable (Mitchell, 1983; Yin, 1989; Scapens, 1990). Therefore, the validity of extrapolating a case study to a population depends on the theoretical reasoning underlying the work, not on whether the example is representative of that population. Furthermore, as well as being generalisable to a theory, cases can be generalised to a class of organisations which have the same characteristics (Ferreira and Merchant, 1992).

The generalisability of a case can be improved by providing an in depth description of the context from which the case arose (Guba and Lincoln, 1981). This description can then be considered by those seeking to transfer the findings to their own settings. The researcher has endeavoured to provide this description in the following chapter; Chapter 7: Fortex's Story. Through such a description of the context, other researchers can determine if the findings are applicable to their own situations (Kennedy, 1979).

5.4. Reliability

Reliability involves *"...demonstrating that the operations of a study - such as the data collection procedures - can be repeated with the same results"* (Yin, 1989, p 41). Without reliability research cannot be regarded as objective (Lee, 1989), and can therefore not be used to derive knowledge about stable laws or theories (Merriam, 1990).

Critics posit that a single case study is likely to be unique with the same set of events unlikely to occur again in the same manner, thereby making it virtually impossible for independent researchers to verify the findings of a case (Lee, 1989; Bailey, 1992). However, the objective of reliability is that if the study was re-performed by another researcher, who follows exactly the same procedures used in the earlier research, that the second researcher should arrive at same conclusions (Griggs, 1987; Yin, 1989).

Consistent with Yin's (1989) and Sykes' (1990) recommendations reliability has been increased through the documentation of the procedures used in the case study so that others can follow exactly the same method.

5.5. Other Possible Weaknesses

5.5.1. Defining the Boundaries of a Case

Case researchers have to face the problem of defining how much of the context to analyse and examine when they are investigating phenomena (Scapens, 1990). One approach is to explicitly limit the area of the study and leave the work to be extended by other researchers. However, the researcher risks missing variables and interrelations by limiting their research in this way. A second approach is *"... to attempt to study everything, but in a more superficial way"* (Scapens, 1990, p 277). A researcher who adopts this approach may not be able to identify which variables have the largest effect of the phenomena being researched. Being exploratory, this thesis adopted the first approach, and sought only to examine two variables which could influence an employee's observations in distress. The risk of missing other variables which contributed to the employees' perception is acknowledged and is a potential limitation of the research. The examination of other variables will be left to later researchers.

5.5.2. Over-simplification

Case studies have also been criticised for over-simplifying or exaggerating a situation (Guba and Lincoln, 1981). For example, a researcher, when analysing a complex situation within its context, will risk mis-attributing, or under or over-emphasizing variables. Similarly, when the report is written, coverage of each individual observation may be impossible through time and page restrictions. However, these restrictions are faced by most, if not all, research of complex social phenomena. For instance, surveys and experiments may fail to identify or mis-attribute variables' relations to each other or over-simplify the interrelations of social phenomena.

At the very least, case studies have the advantage that they initially examine the context from which a clearer depiction of the complexity of a situation may be gained. From this the researcher may choose to simplify the account into what they perceive to be the important issues. Other research methods, by not examining the context, simplify a situation from the outset. Therefore, any criticism of case studies because they can simplify or over-emphasise events is unwarranted because other research methods also have the same associated risks.

5.6. Summary

A case study was selected as the appropriate method to be used in this research for several reasons. Firstly, lacking prior research in the area, the study was exploratory in nature and attempted to generate and examine hypotheses. Secondly, in exploratory research, unexpected situations and variables may arise. A case study allows the researcher the flexibility to adapt to any problems encountered or new issues which arise. Thirdly, employees perceptions, views and opinions are formed through social interaction. Furthermore, the grapevine's functioning is solely based upon personal communication governed by social relationships, and analysing the failure of a company requires an understanding of the internal and internal environment which contributed to its demise. Hence, the research required examining the phenomena in their natural social context, an approach the case study method allows.

The limitations of the method were reduced through the use of multiple sources of evidence, follow-up interviews, documenting the procedures and research method, and providing a detailed description of the context. However, as with all research methods, some risk of researcher bias will remain.

6. Site Selection

The subject of a case study subject should be carefully selected. It would be pointless and potentially fruitless to choose a company at random in the hope of examining a particular phenomena which might not exist in that entity. Therefore,

case subjects are chosen because they are anomalies, or are sites in which the researcher expects to find the phenomena (Merriam, 1990).

At an earlier date, a pilot study was performed using employees from Fortex's Seafield plant in Ashburton. It revealed that employees were aware of the company's troubled position prior to its failure. This thesis sought to re-examine and extend this earlier work, and clarify inconsistencies in the scant previous research. Therefore, employees from the same site, were chosen as the focus of this research.

The participants in the pilot study indicated a willingness to cooperate in any future research. Despite this indication, and consistent with Yin's (1989) belief that prior contact makes site access easier, the researcher sought to verify that Fortex's former employees remained willing to participate in further research. Mr Peter Binnie, the former union secretary at the Seafield plant, who had acted as an intermediary and a contact by organising and taking part in the earlier interviews, was reached with a telephone call June 5, 1995. During this call the researcher provided details of the study, including its objectives, the potential number of interviewees required (approximately 15), and the duration of the interviews, 30 minutes. Mr Binnie confirmed that he and other former employees were willing to participate.

7. Data Collection

Where possible, data was collected through the use of multiple methods. For example, archival records of the IAIS were obtained. However, because informal grapevine communication is largely undocumented, the majority of data was collected through semi-structured interviews.

7.1. Interviews

In exploratory research Emory and Cooper assert that the researcher is:

> *"[t]ypically ... less interested in getting a representative cross-section view than in getting information from those sources that might provide special insights" (1991, p 146).*

Interviews provide a depth of information that may reveal these special insights (Emory and Cooper, 1991), particularly as respondents may be more willing to participate in interviews than surveys (Emory and Cooper, 1991).

Of the three common interview formats, structured, unstructured and semi-structured, the semi-structured interview was selected for this research. This style allows the interviewer to have a list of predetermined topics to ask questions about, but offers the researcher the flexibility to adapt questions to the situations encountered (Merriam, 1990). The flexibility and extra control interviews means the interviewer can change questions to improve the quality of information received. For example, if an interviewer observes that the question is too complex for the respondent, they may rephrase it using simpler terms (Emory and Cooper, 1991).

The benefits associated with this method were also noted by Lal and Donaldson (1988) who utilised semi-sturctured interviews in their research into IAISs. They selected this approach because it *"...allow[ed] the interviewee freedom to respond as fully as possible without the constraint of prearranged questions, thus providing more in-depth information"* (p 87). However, while interviews, particularly semi-structured interviews, have advantages and are appropriate in a situation where the research is exploratory, they also have numerous limitations which must be carefully guarded against. These limitations can be generally categorised as bias, most of which is a side effect of the personal nature of interviews, especially the control and influence an interviewer can have over a respondent.

7.1.1. Interview Bias

Emory and Cooper (1991) list sampling error, non-response error and response error as the three ways bias can be introduced into interviews. Non-response bias was irrelevant to this research as all the interviewees contacted by courtesy of Mr Binnie agreed to be interviewed. Sampling error is only relevant for statistical generalisability. Hence, the primary concern for the research was response bias which *"... occurs when the data reported differs from the actual data"* (Emory and Cooper, 1991, p 328). Response error can be introduced in two ways, interviewer error and respondent bias.

7.1.1.1. Interviewer Error

Emory and Cooper assert that *"...there are many points where the interviewer's control of the process can affect the quality of the data"* (1991, p 328). For example, the interviewer can make mistakes questioning the respondent and recording interview data, or at the extreme, even falsify records and data (Emory and Cooper, 1991). These examples are obvious areas where error occurs. However, error can be introduced through unconscious as well as conscious means.

Error can be introduced where the interviewer makes inappropriate suggestions, emphasises specific words, uses differing tones of voice, and rephrases questions (Emory and Cooper, 1991). Through such means, the interviewer may consciously or subconsciously be biasing the questions, thereby altering the replies respondents give to a question. For instance, a positive affirmation such as saying "yes" to a reply may indicate to an interviewee that response was of the type the interviewer wants. Consequently, the interviewee may change their subsequent responses to what they perceive the interviewer requires.

The interviewer can also influence interview respondents through non-verbal means. For example, an older interviewer may be seen as authority figure by younger people. These young people may modify responses in attempt to please their elder (Emory and Cooper, 1991). The perceived social distance between the interviewer and interviewees is also purported to have some influence on responses (Emory and Cooper, 1991). Similarly, educational levels could have some impact on their perception by interviewees. For instance, where respondents are less well educated than the interviewer, they may defer to him or her and/or alter their responses.

Interviewer error will invariably impact on the responses given by interviewees. However, the interviewees can, without the influence of interviewer error, introduce errors into data themselves. This error is termed respondent error.

7.1.1.2. Respondent Bias

Respondent bias occurs where the respondent give incomplete or inaccurate information (Beed and Stimson, 1985; Emory and Cooper, 1991). This can be either

purposefully, in an attempt by respondents to present themselves in a better light (Simon and Burnstein, 1985) or through natural human fallibilities, such as forgetting information (Simon and Burnstein, 1985; Beed and Stimson, 1985), and the person's own existing biases (Simon and Burnstein, 1985).

Furthermore, as the research examined phenomena in an organisation which has already failed, the interviewee's responses could be prone to hindsight bias. Hindsight bias refers to the tendency of individuals with knowledge of an outcome to alter the perception, of an event so that their ability to predict an event ex-post is greater than their ability ex-ante (Lowe and Reckers, 1994). Therefore, post-collapse, employees may report that they were aware the company was distressed or identify problems which were not apparent before the failure. Due to such problems, responses should not be taken at face value (Simon and Burnstein, 1985).

There are no definite means to negate the effect of response error. The researcher can attempt to view all responses in a critical manner in an attempt to discern where any response error has occurred. However, this will not assure that all incorrect responses will be detected. Instead Emory and Cooper assert that *"...the safest course for research directors is to recognise that there is a constant potential for response error"* (1991, p 329). Through continual awareness of this problem, the author endeavoured to be careful that such bias is not introduced into the interview process by taking care with questions asked, and the responses, both verbal and non-verbal, from the interviewees.

7.2. Interview Details

Former Seafield plant Meat Workers Union Secretary, Mr Peter Binnie, agreed to be one of the 15 interview candidates required and approached other former employees to ascertain whether they would be interested in participating in this research. From this process, a list of 14 other potential interview candidates was prepared.[44] The

[44] This process may have introduced self-selection bias. Benke and Street (1992) report self-selection bias occurs where subjects choose to participate in research for a specific reason. For example, they may participate because they are interested in the subject area. Therefore, those former employees willing to be interviewed may not have been

researcher telephoned these former employees to confirm their continued interest and to schedule a convenient time to conduct the interviews. Each reaffirmed their commitment to being interviewed. The times arranged resulted in telephone interviews being conducted between November 6th and 15th. The interviews ranged in length from 20 to 40 minutes.

Where possible, the interviews were conducted so that the information supplied could be verified by reference to documentary evidence, other interviews or the background information provided in Chapter 7. To aid in this process, Mr Binnie, was available for follow-up interviews.

From his position, Mr Binnie was in contact with all levels of personnel in Fortex's hierarchy and could form an overview of the concerns of the employees and company's performance. Therefore, he was an ideal person to contact regarding any issues or anomalies raised during the interview process. Furthermore, Mr Binnie has 40 years work experience in the meat industry, which included positions with other meat-working companies. From this experience he could identify factors which are common to other meat companies, or industry specific, and therefore do not contribute towards collapse.

Mr Binnie proved invaluable when he acted in this role during the preliminary research conducted in November 1994. From his considerable knowledge of the company, the industry and the staff, he indicated areas where other interviewees had misinterpreted the situation or even exaggerated the amount of people involved in an incident. Taking data and interpretations back to the people from whom they are derived and asking them if the results were plausible, constitutes a 'member check' which is one of six strategies which can ensure internal validity (Merriam, 1990).

7.3. Interview Questions

Consistent with the semi-structured interview approach adopted in this study, several standard questions were prepared. These questions, which are contained within

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representative of the population of Fortex employees. This limitation is discussed in detail in Chapter 11, Conclusions, Limitations and Recommendations.

Appendix 1, were asked of each interviewee. Based on their responses the author constructed more questions to further investigate or elucidate the response, thus providing more detail. However, to allow a comparison between the interviewees' responses each interview initially followed a standard format.

Each interview began with an explanation of the purpose of the research, an assurance that the interviewee's name would remain confidential and a request that the interview be recorded so that the author could more easily remember what the interviewee said. No interviewees objected to the use of the tape-recorder. Mr Binnie, whose interpretation of Fortex's failure had already received media coverage (Brett, 1994), gave consent allowing his name to be attributed to his responses (Brett, 1994).

Several introductory questions were asked. The questions concerned such details as the length of time the employees had been employed by Fortex and whether they were shareholders and/or union delegates. Then, to determine the distress events employees observed, whether the employees believed that the company was distressed and could fail, and the employees' information sources, the interviewees were asked five general questions.

- Firstly, the employees were asked to report their reaction when Fortex was placed into receivership, in particular whether they were surprised. The interviewees' responses allowed the determination of whether they expected the company to fail and also indicated how many of the employees understood that the company was distressed prior to its failure.

- Secondly, all of the employees were asked to report the concerns they held regarding, or rumours heard about, the company's future before it collapsed. This line of questioning established the problems the employees observed during the company's life, revealed whether the surprised and unsurprised employees observed the same factors, and also allowed an analysis of which of those factors, if any, caused the employees to believe that the company was distressed.

After the identification of each concern the interviewees were asked how they identified that concern. The interviewees were then asked if they had heard any rumours, or if the level of rumours had increased as the Fortex's failure approached, and where they obtained most of their information. This process allowed the influence of informal grapevine information to be placed in the overall context of available information sources. It also allowed a better identification of where the information was obtained which contributed to the employees' observation of distress.

Because Walton (1961) warned that *"...it seems clear that employees don't get nearly as much information from the grapevine as they think they do"* (1961, p 48) the term 'grapevine' was not mentioned in any of the questions. Therefore, when the interviewees mentioned the term grapevine the response was unsolicited. The effect of these measures is that the responses regarding grapevine information are likely to be more accurate, but if they are inaccurate, understated rather than overstated.

The interviewees were also asked whether they were aware of the fraudulent activities, covered by the media post-collapse, prior to Fortex's receivership, and whether they believed that their observations and opinions of Fortex were consistent with the public's perception of a successful well-managed company. This second question provided information on the employees' views and opinions of the company, thereby assisting the interpretation of their observations in context.

There was one question which related specifically to the IAIS (refer Appendix 1, Q6). While this question was directed to the union delegates who maintained it, each of the interviewees were asked if they were aware the system existed. If they were aware the interviewee was also asked to provide information about the IAIS.

8. Conclusion

This thesis uses the case study method with data being predominantly collected through the use of semi-structured interviews. This method is appropriate because the research is essentially exploratory and requires detailed data of a single entity in which the phenomena studied may have occurred. The method also offered the

researcher the flexibility to adapt to, and research, any anomalies encountered, a necessity in a previously unresearched field.

While this method has limitations, many measures were used to counteract their effects. These measures included the use of multiple sources of evidence, follow-up interviews, a review of the draft case by both a contact within the company and the researcher's supervisor, and the detailed documentation of the both context of the case and research processes used. Through such means, the potential limitations of the method adopted in this thesis have been reduced and the validity of the findings increased.

Chapter 7

Fortex's Story

1. Introduction

Fortex was a Christchurch based meat marketing and processing company. Formed in 1985, it became New Zealand's only publicly listed meat working company when it was floated on the New Zealand Stock Exchange (NZSE) in June 1990. Public listing was the first of many notable differences between Fortex and its competitors.

In an industry characterised as conservative, Fortex differentiated itself by targeting a niche market, producing added-value products, and introducing numerous innovations. The innovations included a total quality management programme, the most advanced killing and processing plant in the world (du Chateau and Legat, 1992), and a unique labour contract which allowed shiftwork and abolished penal rates, attracted media and political attention. From their perspective Fortex seemed to epitomize the qualities that New Zealand companies needed to lead the country out of an economic recession (du Chateau and Legat, 1992; Coddington, 1992; Brett, 1994; The Press, 1995d). However, despite the positive attributes, the accolades, and the innovations, Fortex was placed into receivership on March 23rd, 1994.

This chapter provides an overview of Fortex's performance, structure, size and objectives in the years prior to its collapse. Also contained is a brief synopsis of the reasons offered for Fortex's failure. The information contained in this chapter has been obtained from publicly available information sources, such as Fortex's annual reports, newspapers and magazine articles, and could potentially differ from the employees' observations. This background information is required to provide the reader with an understanding of the company, and is essential for the contextual analysis a case study necessitates.

The overview of Fortex's life will be separated into two time periods; the pre-listing 1985 to 1989 (inclusive) financial years and the post listing 1990 to 1994 (inclusive) financial years.[45] The 1990 to 1994 financial years are be related on an individual

[45] Fortex's financial year ended on August 31.

basis. The overview will be presented this way because post-listing, the company's size and strategy changed markedly. Furthermore, because Fortex was required to produce mandatory annual financial reports and attracted far more media attention in the post-listing period, there is more information from which to provide an overview of the company's performance.

2. Fortex: Prior to Sharemarket Listing

Fortex was formed in 1985 by the amalgamation of three companies: *"Cattle Services, a small beef exporting and marketing company, Fort Export, a farmer co-operative marketing sheep meat, and Canterbury Venison, a deer export and packaging facility"* (Brett, 1994, p 52). Each of the three companies were headed by Graeme Thompson who, upon amalgamation, became the managing director of Fortex.

In its early life Fortex differentiated itself in two ways. Firstly, it was demand driven, processing animals only after orders were received. Secondly, it further processed each carcase into specific chilled and frozen cuts to add value. To enable further processing, Fortex built its own technologically advanced plant in 1986. Situated at Ashburton, Seafield was a single-chain plant which was designed to process lamb, venison and goat meat (Fortex Group Annual Report[46], 1990). The plant contributed to Fortex's achievement of a first year turnover of $21,172,000 and an associated net consolidated profit of $695,000 (FGAR, 1990).

Despite this positive start, the next two years were less financially successful. While turnover increased in both the 1987 and 1988 financial years, to $52,588,000 and $66,165,000 respectively, the company produced net losses of $490,000 and $530,000 (FGAR, 1990). However, during this period, Fortex achieved its first two notable successes negotiating two breakthrough agreements with its employees. The first in January 1988 introduced a second shift which allowed the company to operate its plant for 16 hours a day, six days a week. This agreement significantly improved

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[46] From this point forward Fortex Group Annual Report is simplified to FGAR.

the company's financial performance. In the 1989 financial year, Fortex achieved a $2,860,000 net profit and again increased turnover.

The second agreement, which was termed *"an employers' [sic] long-time dream"* and *"revolutionary"* (Rennie, 1988, p 1) by the media, freed the company from the New Zealand Meat Workers' Union imposed productivity limitations and allowed the following:

- Two 11 hour shifts per day over six days a week;
- No penal rates for employees working weekends;
- The workers to receive the same wage for working three 11 hour days per week, as they received in the past for working a five day week;
- The workers to have three days on, followed by four days off; and
- The introduction of four teams of employees to run the shifts (Rennie, 1988).

The second agreement gave Fortex a considerable advantage over its competitors who continued operating under Meat Workers' Union imposed conditions, and was the catalyst for the Employment Contracts Act (Brett, 1994). In the early years the agreement was believed by management to be Fortex's greatest strength (Brett, 1994). Indeed, when finally implemented in 1990 the second agreement contributed to an improved financial performance.

In the same year Fortex formed its first wholly owned subsidiary (FGAR, 1990). Fortex Europe was a marketing company situated near Brussels, in Belgium, which predominantly supplied chilled meat cuts to the restaurant and hotel industry (FGAR, 1993). This event was the first in a five-year plan which involved massive capital expansion. The expansion was to be financed by floating the company on the NZSE (FGAR, 1990).

3. Fortex: Post Stock Market Listing

3.1. 1990

The directors considered that the public share offer was *"...in the best interests of both shareholders and farmer suppliers"* (FGAR, 1990, p 5). The $28 million of capital the offer provided was used to develop Fortex's second processing plant, Silverstream, which was to be constructed at Mosgiel near Dunedin (FGAR, 1990).

3.1.1. Silverstream

Silverstream was the flagship of the Fortex Group and considerably increased the company's processing capacity. It was envisaged that Silverstream would employ 700 staff and process one million lambs in 1990/91 and two million lambs in 1992. Unsurprisingly, Fortex's Directors expected that Silverstream would be *"...a profitable and efficient strategic investment for the company"* (FGAR, 1990, p 6).

Based on Seafield's proven design, Silverstream was a single chain processing plant which used all parts of an animal. However, it had considerably more automation and technology, and was variously described as *"...a new generation in meat processing"* (FGAR, 1990, p 11) and *"...the most modern killing and processing plant in the world"* (du Chateau and Legat, 1992, p 61). Lacking the facilities to blast-freeze entire carcases, Silverstream demonstrated Fortex's commitment to further processing to add product value.

The Silverstream plant was the major component of Fortex's five-year business plan which involved considerable expansion of its processing and marketing activities (FGAR, 1990). Originally its construction was planned for the 1991 financial year (FGAR, 1990). However, *"...in response to major ownership changes within the South Island meat industry"* (FGAR, 1990, p 13), construction was bought forward to April 26th, 1990. The plant was ready for commissioning on November 1st the same year (FGAR, 1990). This event was typical of Fortex's next four years. The company seemed to expand at a frantic rate; the Silverstream plant alone more than doubled the size of the company.

3.1.2. Seafield

During the period in which Silverstream was constructed, Fortex's existing plant, Seafield, was also the subject of several capital development programmes (FGAR, 1990). The programmes, which enabled the implementation of the extended shiftwork system that the second agreement allowed, consisted of the following:

- *"Construction of a casings processing facility;*
- *Extension of the sheepyards;*
- *Additional cooling floor capacity;*
- *A workshop for maintenance engineers;*
- *Extra laundry facilities; and*
- *A new automatic blast freezer for cartoned meats" (FGAR, 1990, p 10).*

The introduction of the extended shiftwork began in January and was completed in March (FGAR, 1990). The shiftwork, in conjunction with the extra room created from the capital expansion, resulted in an increase in throughout of 400,000 lambs to 1.4 million in the 1990 financial year (FGAR, 1990).

3.1.3. Company Objectives

Silverstream's construction and the capital expansion at Seafield were expected to increase productivity and provide considerable cost savings. Both plants were integral to the achievement of Fortex's continuing goal which was *"...to be the most efficient meat marketing and processing company in New Zealand"* (FGAR, 1990, p 6), a goal which was to be achieved by targeting six areas (FGAR, 1990). These areas, according to the Chairman, John Austin, were:

- Marketing activities;
- Achieving higher margins;
- Quality control;
- Shiftwork;
- Good employee relations; and

- Environmental soundness (FGAR, 1990).

Of these areas, marketing was particularly emphasised, because Fortex was *"first and foremost a marketing company"* whose *"[m]eat-related activities depend for their success on the ultimate effectiveness of marketing our meat products"* (FGAR, 1990, p 9).

3.1.3.1. Marketing

The objective of the marketing function was to have all the animals pre-sold before they were processed (FGAR, 1990). Therefore, each animal's contribution to the company's profitability was already determined and assured. If this marketing objective was achieved, the company would have a minimal amount of inventory on hand at any given time. Any inventory would consist of sold goods which had not yet been delivered.

To assist in meeting this objective, Fortex employed more marketing staff in the 1990 financial year and intended to make further additions in strategic areas (FGAR, 1990). One such addition was announced in 1990 with a sales and distribution office, similar to Fortex Europe, planned to open in the United States in the next year. The office would provide a means to increase Fortex's export sales in the US market. The US market was one of five markets[47] where Fortex had *"...a wide range of dedicated customers for Fortex lamb, venison, and goat meat cuts"* (FGAR, 1990, p 9).

While the vast majority of Fortex's sales and marketing emphasis was directed towards the export market, 1990 saw its marketing activities extend into the domestic market where it introduced 'Courier Cuts.' Courier Cuts was a marketing concept which specifically catered for the restaurant industry. It offered the restauranteur a guaranteed 24 hour delivery service of Fortex lamb, goat, venison and beef (FGAR, 1990). During the 1990 financial year, Courier Cuts supplied 350 restaurants situated throughout New Zealand (FGAR, 1990). The programme also provided a

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[47] The other markets were Europe (served by Fortex Europe), Japan, Scandinavia, and the Mediterranean (FGAR, 1990).

testing ground for products for the export markets, where the majority of trade was also performed with the restaurant and hotel industry (FGAR, 1990).

Fortex's strong marketing emphasis became even more important and necessary as the company's size and processing capacity increased. The inability to blast-freeze meat meant that, unlike its rivals, Fortex could not export whole carcases for which there was a well established market. Instead, increased production required identifying and developing new markets which demanded pre-cut lamb, beef, goat and venison.

The other five target areas for Fortex to achieve its goal, like marketing, differentiated Fortex from its competitors.

3.1.3.2. Achieving Higher Margins

The directors believed Fortex's profitability would be enhanced by its added-value processing emphasis (FGAR, 1990). This approach was unique in an industry which predominantly sold its produce as blast-frozen whole carcases.

3.1.3.3. Quality Control

To ensure the customer always received a quality product, Fortex attempted to vertically integrate and take control of all operations from the farm gate to the market-place (FGAR, 1990). The company performed every function: procurement, slaughtering, added-value processing, by-product processing, cool storage, transport, and distribution and marketing, itself (FGAR, 1990). Therefore, Fortex could enforce, monitor and have total control over its own quality standards.

3.1.3.4. Shiftwork

As outlined earlier, the company had reached an agreement with the Meat Workers Union allowing extended shiftwork. Through this agreement Fortex could maximise the use of its plant and equipment (FGAR, 1990). For instance, in the 1990 financial year, Seafield operated for 265 days compared to the traditional processing chain which operated on average for 100 days a year (FGAR, 1990). Due to the extended

shiftwork, Fortex projected that it could slaughter and process 20 percent of the South Island's lambs per year on two chains while the remaining 80 percent would be slaughtered on 62 chains (FGAR, 1990).

3.1.3.5. Good Employee Relations

In addition to the agreement concerning shiftwork, Fortex also had an employee share scheme. Through these two measures the company experienced *"harmonious industrial relations"* (FGAR, 1990, p 7). Because the meat industry had historically been noted for its industrial disputes the good employee-management relations engendered by the shiftwork and share scheme provided another advantage for Fortex to exploit.

3.1.3.6. Environmentally Sound

Lastly, Fortex demonstrated a social conscience and environmental responsibility. Management adopted policies to eliminate odours from the plants and ensure effluent was disposed of responsibly (FGAR, 1990).

These six areas, which were targeted in order to achieve its goal, initially provided the company with a considerable competitive advantage. However, despite this advantage, Fortex, like all meat companies, was dependent on the procurement of livestock at a reasonable price in order to remain profitable.

3.1.4. Procurement

With the increase in size of the plant and staff of the company, Fortex required an increased number of lambs to fully utilise its plants. To provide a wider coverage of South Island suppliers and attempt to obtain a targeted 20 percent market share, Fortex increased its procurement staff and offered a higher price per lamb than its competitors. For example, the 1990 Annual Report revealed that Fortex paid an average price of $34.31 per lamb whereas its competitors, Primary Producers Cooperative Society (PPCS) and Alliance paid $31.80 (FGAR, 1990). This substantial difference was also evident in 1989 where Fortex paid $22.42 per lamb compared to $19 by its competitors (FGAR, 1990). Fortex had also taken the

unusual step of contracting farmers to produce lambs out of season so that they could meet unseasonal export demand (FGAR, 1990).

While Fortex's emphasis was on lamb processing, in 1990 Fortex also processed 30 percent of New Zealand's farmed venison. Much of this venison was processed by Fortex's Tauranga based subsidiary, Summit Deer Products (FGAR, 1990). The company, in which Fortex held a 60 percent shareholding, had access to the North Islands deer supplies and in 1990 increased the number of deer processed by 35 percent (FGAR, 1990).

In 1990, Fortex had two other subsidiary companies, Fortex Europe SA/NV, and Ashcold. Ashcold was a cold store facility in Ashburton. Its acquisition was, according to the annual report, *"a worthwhile purchase"* (1990, p 7), because of the increased production shift work the Seafield plant allowed. Ashcold, like Summit and Fortex Europe, operated at a profit (FGAR, 1990).

3.1.5. Financial Performance

In its first year of public listing, Fortex demonstrated its competitiveness and the effect of its differentiated and innovative approach with a profit after tax of $4,812,000, which to that point was the organisation's highest annual profit. This profit was generated from an increase in turnover of over 80 percent, from $74m to $136m. The company had also generated an increase in cash held in the cash flow statement of $14m, most of which could be attributed to the financing activities, the share float and loans received, which the company had undertaken during the year. Indeed, financing cash flows were $43m while, due to expansion, cash flows from operations and investment activities were negative $8.3m and $20m, respectively (FGAR, 1990).

3.1.6. Summary

Through building a new plant, expanding Seafield and purchasing Ashcold, Fortex had more than doubled its total assets. From its 1990 financial results, a record

profit, and *"...perhaps the strongest balance sheet in the meat business"* (Gibson and Birchfield, 1991, p 36), Fortex's policy of expansion was seemingly justified.

Unsurprisingly, the future of the company was seen to be promising with increases in profitability predicted to come from Silverstream and new marketing initiatives (FGAR, 1990). Both the managing director, Graeme Thompson, and the chairman, John Austin, emphasised the company's potential and promise. The public and media agreed and based on its 1990 performance, its potential, and its innovative approach and export emphasis, 1990 saw Fortex win its first award, the Management Magazine and Deloitte Ross Tohmatsu Award for 'Company of the Year.' From this base, Fortex continued its expansion in the 1991 financial year.

3.2. 1991

The 1991 financial year, similar to 1990, was characterised by continued capital, processing, and marketing expansion.

3.2.1. Silverstream

The Silverstream plant was fully commissioned and employed over 700 new staff (FGAR, 1991). The plant processed one million lambs in its first season. However, due to staff training while the plant was operating, the products did not meet Fortex's high quality standards (FGAR, 1991). Some customers received cuts that did not meet their specifications (FGAR, 1991). The problems associated with the new plant, including staff training, were believed to be well behind the company by the end of the 1991 financial year. Silverstream was ready to perform to its maximum capability in 1992 (FGAR, 1991).

3.2.2. Seafield

The original plant at Ashburton was described as having had a *"satisfactory year"* (FGAR, 1991, p 10). Throughput in this year had increased from 1.4 to 1.5 million lamb-equivalents (FGAR, 1991). All but 300,000 of these lambs were further

processed to add value (FGAR, 1991). Contained within the increased throughput was a 136 percent rise in deer kill and an increased goat kill (FGAR, 1991).

3.2.2.1. Processing Expansion

Despite Silverstream's construction in 1990, the five-year plan prescribed two more capital developments in 1991. Firstly, fellmongeries were to be built at both Silverstream and Seafield (FGAR, 1991). Fellmongeries remove wool from lamb skins. The pelts would be sent to Seafield for conditioning before being exported and the wool would be sold separately (FGAR, 1991). In total the project would cost $13m and was evidence of Fortex's commitment to efficiency, and a desire to use, and add value to, every part of an animal. With the fellmongeries came another technical innovation, barcoding. Each skin was barcoded so that the supplying farmers could be paid according to its quality.

Secondly, $1.1m was invested to update Fortex's data processing systems (FGAR, 1991). The update was required *"...to provide improved and quickly updated cost control for management as well as the ability to achieve rapid response to customer needs"* (FGAR, 1991, p 6). The project was to be completed in 1992 with an additional $1m investment.

3.2.2.2. Subsidiaries

Summit Deer Products was fully taken over during the 1991 financial year (FGAR, 1991). The purchase of the outstanding 40 percent capital was yet another cash outlay and an example of Fortex's policy of vertical integration. Summit and the company's other subsidiaries, Ashcold and Fortex Europe, had successful years and contributed a profit to the consolidated accounts (FGAR, 1991). However, Summit's 1991 performance was notable for another reason. During the 1991 financial year it became the only meat processing company in the world to hold an ISO 9002 quality rating (FGAR, 1991).

3.2.3. Quality

Summit's achievement further differentiated Fortex from its competitors both in New Zealand and world-wide, yet ISO accreditation was only one component of Fortex's emphasis on quality. The company adopted Total Quality Management a (TQM) philosophy programme.[48] By instituting this regime, Fortex committed itself to *"...the attainment of excellence in all aspects of our operations"* (FGAR, 1991, p 13).

3.2.4. Marketing

Fortex's marketing activities, which with quality were to be the two objectives which from now until the company's eventual demise were particularly emphasised, also underwent expansion in 1991. Furthering the company's offshore activities was the establishment of a marketing office in Newport, near Los Angeles, in the USA (FGAR, 1991). Similar to Fortex Europe, this office predominantly supplied the restaurant and hotel industries. The future of the office was bright with sales growth expanding at 100 percent (FGAR, 1991).

Fortex continued to be market driven. The company's marketing team was *"...successful in maintaining a pre-sold position on most of the high-value products processed during the year"* (FGAR, 1991, p 11). However, the company's marketing function was inhibited by a reduced international demand for lamb and venison (FGAR, 1991).

3.2.5. Procurement

Fortex procured and processed 2.5 million lambs in the 1990/91 season, an increase of 1.1 million lambs from the last season. However, despite a successful lambing season,[49] *"...the company's livestock procurement representatives had a particularly*

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[48] TQM involves continuous improvement to achieve a level of quality which meets customer expectations. It involves a daily commitment from every person in the organisation (Kanji, 1990; Smith, 1990; Claus, 1991).

[49] The lambing season begins in August and ends in late September.

demanding year" (FGAR, 1991, p 9). Fortex's increasing requirement for lambs created intense competition between itself, PPCS and Alliance. There was an insufficient pool of stock for each company to fully utilize their plants.

Excess demand meant Fortex paid an average of $34.20 per lamb, compared with $34.31 in the previous year (FGAR, 1991). Fortex was committed to buying at inflated prices to utilise the newly commissioned Silverstream and attain its goal of a 20 percent market share.

3.2.6. Financial Performance

The company's $2.89 million profit for 1991 financial year was considered *"...satisfactory in light of hostile market conditions coming on top of the strains imposed from doubling the Company's operations"* (FGAR, 1991, p 8). The effect of the high prices paid for stock and the weakened overseas export market was evident. Even with a $77m increase in turnover, the company's net profit was $1.8m lower than 1990.

Fortex also had a $12 million decrease in cash held. This decrease consisted of a $20 million shortfall from operations, a $50 million deficit from investing activities, and a positive flow of $58 million from financing activities. Financing activities consisted of a $39m increase in term loans and a renounceable rights issue of ordinary shares raising $6.1m. As in 1990, the overall decrease in cash held was attributed to increased levels of inventory and capital developments.

The balance sheet reflected this expansion in assets with an increase of $51 million from the last year. Notable changes in the balance sheet included a $16m decrease in cash at bank (which was used to fund Silverstream's development) and a build up in working capital, particularly inventories (FGAR, 1990). Unusually, during a year in which Fortex was purported to have been *"...successful in maintaining a pre-sold position on most of its high value products processed during the year"* (FGAR, 1991, p 11), the inventory held by the company increased from $19m to $45m. Lastly, due to the capital expansion Fortex underwent during the year, the company's plant value increased by $40m.

3.2.7. Summary

Despite a disappointing year, the outlook for the company's performance in 1992 was good for several reasons. Firstly, the world lamb prices were expected to improve through increased demand (FGAR, 1991). Secondly, Alliance had announced the closure of two of its freezing works during the year. This closure was expected to reduce the lamb processing capacity by three million, thereby bringing more balance into the supply and demand balance in the South Island (FGAR, 1991). Thirdly, the company had finished its period of capital development; therefore, no further disruptions were expected. Lastly, New Zealand's economy was favourable due to low interest and exchange rates (FGAR, 1991). For these reasons, Graeme Thompson asserted that Fortex was *"...more confident about its ability to perform than at any time previously"* (FGAR, 1991, p 13).

3.3. 1992

The positive outlook was justified. The 1992 year saw Fortex produce its highest net profit of $9.12m and was undoubtedly the company's most successful year in all respects. The year saw the completion of Fortex's five-year strategic plan. The plan was completed in under four years. After such rapid expansion the company announced that it had entered into a period of 'consolidation' (FGAR, 1992).

However, this consolidation period was obviously planned to be short. During the year the managing director, Thompson, announced that two wholly owned marketing companies were to be established in Hong Kong and the United Kingdom. The US office would also be strengthened (FGAR, 1992). This expansion was seen as *"...an important development during the present consolidation phase"* (FGAR, 1992, p 11). Furthermore, the company investigated the viability of building a processing plant in the UK.

3.3.1. Processing

In 1992 Silverstream completed its first full processing season[50] (FGAR, 1992). During the year, the lamb and sheep kill was 1.64 million, a 57 percent increase from the last year (FGAR, 1992). The quality and efficiency problems which the plant experienced in the previous year had been successfully resolved with the plant operating at between 98 percent and 100 percent efficiency (FGAR, 1992).

At Seafield, the lamb kill remained 1.5 million. However, as a result of *"...efficiency improvements, the increased deer kill and the addition of the fellmongery and the lamb pelt processing"* (FGAR, 1992, p 11), Seafield's contribution to the consolidated accounts increased by 60 percent.

3.3.2. Subsidiaries

Summit Deer Products' throughput increased by 6.4 percent to a capacity 22,000 deer processed in the 1992 financial year (FGAR, 1992). The increased throughput resulted in a four percent increased contribution to the company's consolidated account (FGAR, 1992).

Ashcold, the company's wholly owned cold storage facility in Ashburton, exceeded its budgeted profit level and, consistent with Fortex's TQM policy, was rapidly working towards attaining ISO 9002 accreditation (FGAR, 1992). Ashcold would be the first cold store in New Zealand to hold such a quality rating.

3.3.3. Quality

Ashcold was not the only facility attempting to attain such a rating. Seafield and Silverstream were also working towards achieving ISO 9002 quality ratings before the end of 1993 (FGAR, 1992). The Chairman, John Austin, admitted that *"[g]aining ISO 9002 accreditation throughout the Group by 1994 is an ambitious target."* However, when it was completed it would *"...put Fortex as a complete unit*

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[50] Originally its first full processing year was meant to be 1991 (FGAR, 1990).

at the pinnacle of world certification standards" (FGAR, 1992, p 7). The effort demonstrated a commitment to quality which would be needed if Fortex was to achieve its newly worded mission statement which was to be *"...the world's best supplier of high quality selected meat products"*[51] (FGAR, 1992, p 4).

This goal was to be achieved through a company wide TQM approach which would ensure customer satisfaction (FGAR, 1992). The company's quality policy was based on three principles:

> *"1. High quality standards will be achieved mainly through our staff, who will be well trained and disciplined, yet flexible.*
>
> *2. Our staff are empowered to manage and improve their own quality work, in an atmosphere that encourages collective participation.*
>
> *3. We will foster with our suppliers long term relationships based on trust and information sharing to our mutual benefit" (FGAR, 1992, p 5).*

To achieve the first and second objectives, the TQM programme was extended throughout the entire organisation. The third objective was to be achieved with the introduction of a unique marketing scheme which explicitly focused on suppliers.

3.3.4. Marketing

The scheme, entitled 'Fortex Formula,' rewarded farmers for the meat yield of each lamb (FGAR, 1992). Described as *"a better system for rewarding farmers"* (FGAR, 1992, p 13), Fortex Formula departed from the Meat Board grading system and instead *"...set its own comprehensive schedule of prices based on the meat yield of each carcase and its market value"* (FGAR, 1992, p 12). The scheme consisted of three components:

1. Fortex Yield Grading: which used an electric probe to distinguish between the meat and fat on a carcase so that a farmer could be paid for the actual meat yield at the market rate (FGAR, 1992).

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[51] The earlier pronounced 'continuing goal' was to be *"...the most efficient meat marketing and processing company in New Zealand"* (FGAR, 1990, p 6).

2. Fortex Schedule Plus: which offered two methods by which a farmer could sell their stock. The first offered the schedule payment 14 days after processing with a market related bonus payable two to three months later. The second was the traditional option of selling from the farm-gate (FGAR, 1992).

3. Fortex Information Reports: which gave details of the health, weight and fat content of each animal which farmers could use to improve the quality of their stock and thus Fortex's meat products (FGAR, 1992). In early 1993 this service was expected to extend to include a report on the quality of the pelt of each animal.

By rewarding farmers for healthy lean stock the quality of the animals Fortex received was expected to improve. According to one farmer, Fortex and Fortex Formula was:

> *"...exactly what we'd all wanted: extended killing seasons, bonuses for quality stock, innovative processing. Service to the farmers in terms of feedback on stock condition and so on was excellent" (Brett, 1994, p 50).*

In the domestic economy, Fortex complemented its existing Courier Cuts programme with 'Fortex Gourmet Direct.' Gourmet Direct was a mail order service which courier delivered export quality cuts of lamb, beef, and venison to the door of the householder (FGAR, 1992). This programme was well received and won the Printpac UEB Food Awards trophy for excellence in meat, fish and poultry (FGAR, 1992).

The company's international marketing activities were performing well. During the year, Fortex had increased sales to the USA by 100 percent, opened a new market for lamb in Egypt and negotiated a $17 million venison contract in Germany. Its European marketing subsidiary, Fortex Europe, also had a very successful year, exceeding budget expectations by 175 percent (FGAR, 1992, p 12).

3.3.5. Procurement

Like the company's marketing function, the procurement team also performed well. 3.1 million lambs were procured, an increase of 1.7 million from 1990 and 600,000

from 1991. The increased procurement was a considerable achievement when the total South Island lamb kill had reduced in both of these years.

A reduced lamb kill was also expected in 1993 due to the severe storms which struck the South Island. The storms were predicted to reduce the 1993 lamb kill by two million, (from 17 to 15 million), and the mutton kill by over 650,000, (from 2.7 to 2.03 million), (FGAR, 1992). However, this further reduction in stock numbers was not expected to unduly affect Fortex because it was not seeking an increased number of animals to process (FGAR, 1992).

3.3.6. Financial Performance

Financially, the company posted a record profit of $9.13 million from a nearly $300 million turnover. During the period, total assets increased by $27 million, most of which could be attributed to the completion of the fellmongery developments at Silverstream and Seafield. These developments cost $22 million and were predominantly funded from financing cash flows,[52] particularly, from an increase in borrowings of $15 million (FGAR, 1992). Another share issue, this time raising $14 million, was undertaken in this year (FGAR, 1992). The proceeds of this issue were needed to establish the new overseas marketing offices (FGAR, 1992).

3.3.7. Summary

This year was not only notable for the company's financial performance, Fortex also won two business awards, the Television New Zealand Award for best corporate strategy and the Tradenz Air New Zealand Export Award for overall excellence in exporting. Once again the company was in the public limelight for its achievements, particularly its emphasis on quality and export-led marketing approach. However, the period of success and consolidation would end in 1993.

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[52] Overall the company had a negative total cash flow of $1.06m (FGAR, 1992).

3.4. 1993

As a result of many factors, most of which originated from the 1992 storms, the 1993 financial year proved to be much more difficult than expected.

3.4.1. Seafield and Silverstream

The processing function was affected by the storms. Seafield was hit the hardest and suffered a 25 percent reduction in the number of animals slaughtered (FGAR, 1993). By comparison, Silverstream's kill was only down six percent against an average reduction in South Island lamb kill of 16 percent (FGAR, 1993). However, both the chairman and managing director found positive attributes from both plants performance during the year. At Seafield another upgrade in the lamb processing room had improved capacity and efficiency, the casings and renderings departments both had improved yields, and the fellmongery and pelthouse operations were refined, resulting in better quality pelts and more wool recovery (FGAR, 1993). Silverstream was given credit for improved efficiency, quality and production standards (FGAR, 1993).

3.4.2. Quality

Both plants were also lauded by the managing director and the chairman for the change in organisation culture amongst the personnel (FGAR, 1993). This change provided an:

> *"...environment which encourages people to think, plan and improve methods, systems and techniques which is leading to productivity improvement, more job satisfaction and a general spirit of co-operation" (FGAR, 1993, p 9).*

Despite the culture change, and both Seafield's venison plant and Ashcold receiving ISO 9002 accreditation, management realised that even the highest quality product could not assure the success of the company in the future. Therefore, in 1993 the organisation's marketing function was expanded and even more heavily emphasised as an attribute which would be important to Fortex's future success.

3.4.3. Marketing

During the 1993 financial year Fortex opened two new marketing offices, Fortex UK, situated just outside London, and Fortex Hong Kong (FGAR, 1993). Fortex UK opened in November 1992 and concentrated on further developing the market for chilled and specialist frozen lamb cuts (FGAR, 1993). The Hong Kong office emphasised the marketing of deer products, such as velvet, used in Asian medicines, but also supplied meat products to the restaurant and hotel trade (FGAR, 1993). Interestingly, this expansion of the marketing function was performed during a period of self-proclaimed consolidation.

3.4.4. Expansion

During 1993 there were two more indications that the period of consolidation, short as it had been, was over. The first was the purchase of a 15 percent interest in the Phoenix Meat Company a South Island beef processor. According to both the managing director and the chairman

> *"[t]his strategic move reflects a desire to have an involvement in the procurement of beef from our South Island farming clientele and in the marketing of the product through Fortex USA and Fortex Hong Kong" (FGAR, 1993, p 12).*

The second, was the planned development of a fully integrated sheepmeat plant in the United Kingdom (FGAR, 1993). While *"...no decision would be made in terms of developing in the United Kingdom until satisfactory profitability is established from existing activities"* (FGAR, 1993, p 12), the plant was part of the company's strategic plan for Europe. The development seemed inevitable. Two potential sites had already been chosen. Planning approval and consent had been received for each site (FGAR, 1993).

In the domestic market, Fortex's existing activities, Fortex Courier Cuts and Fortex Gourmet Direct, were also further developed (FGAR, 1993). Through this development Courier Cuts' sales volume increased by 155 percent (FGAR, 1993). Its other domestic marketing programme, Fortex Formula, received a Television New Zealand marketing award (FGAR, 1993). However, as unique and well received as

Fortex Formula was, it could not assure Fortex's immunity to the lamb shortage which faced the entire industry.

3.4.5. Procurement and Processing

The meat processing function of the company was severely inhibited by the reduced stock caused by the storms in the 1992 lambing season (FGAR, 1993). Fortex was able to procure just 2.6 million lambs, a decrease of 500,000 from the previous year (FGAR, 1993). The scarcity of lambs caused intense competition and a price war between Fortex and its competitors, PPCS and Alliance.

3.4.6. Financial Performance

Due to high procurement prices and lower throughput, the company sustained a net loss of $4.8 million for the year. If the value of inventory had not increased by $21.2 million, the loss would have been much worse. The cash flow statement also reflected that the company's operations were not profitable. Operating cash flows were negative $16.3 million, the third deficit in the last four years.

3.4.7. The Future

Despite 1993 having the worst financial performance since the company was listed, the company's future was viewed as positive with the directors expecting *"...a significant improvement in the Company's performance for the 1994 year"* (FGAR, 1993). The expectations were based on cost reductions and improved productivity from the company's processing activities (FGAR, 1993). Better results were also predicted from livestock procurement and marketing due to a return to more favourable climatic conditions and a consequent increase in livestock numbers (FGAR, 1993).

4. 1994: The Collapse of Fortex

Despite the positive predictions, Fortex's performance did not significantly improve in the 1994 year. The company failed just six months later.

Fortex's 1993 annual report, detailing the $4.8 million loss, was released in September. Later in the same month, with the realisation that the company was in difficulty, the company's management approached the union for wage concessions. An agreement was reached which provided for an extra 20 minutes unpaid work from each worker per day and increasing the speed of the killing chain (Brett, 1994). The concessions were expected to save $3.8 million (Brett, 1994).

On January 24th 1994, Fortex responded to its trustee's concerns over the company's financial position, and ability to continue operations, that the company was on a 'sound footing' (Brett, 1994).[53] During the period between December 1993 and February 18 1994, the share price had fallen from $1 to 70 cents per share. The NZSE, seeking to ascertain reasons why this dramatic fall had occurred, questioned Fortex's management (Brett, 1994).

Four days after this event, on February 22nd, the trustee once again asked Fortex about its financial condition, and was assured that the company was secure. However, the company was not. In late February, the board of directors was informed that Fortex expected an interim loss of between $40 million and $50 million (Brett, 1994). The loss was caused by the third procurement war in four years. The rival companies were paying prices well above market returns to maintain throughput (MacFie, 1994).

On March 8th, the trustee was informed of the impending loss. Later that day the board of directors appointed an independent accountant, Michael Stiassney, to assess the company's financial position (Brett, 1994). Unsurprisingly, the financial market reacted unfavourably to the appointment and Fortex's share price fell to 58 cents.

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[53] The trustee, Trustees Executors and Agency Company of New Zealand, represented the company's debenture holders, and two principal lenders, the Bank of New Zealand and ANZ Banking Group Limited.

The next day the price fell a further 15 cents as one of the company's major investors, T. A. Pacific, sold its investment (McEwen, 1994). The company had invested $9.7 million in Fortex shares three months earlier, and, according to some reports, lost $7 million from the sale (McEwen, 1994).

Two days later, on March 11, Fortex publicly announced that the company's half yearly result would be a $45 to $50 million dollar loss (Brett, 1994). The loss placed Fortex in breach of its trust and was attributed to operating losses and stock write-downs (Brett, 1994). This was the first public announcement which demonstrated the depth of the problems Fortex faced. Consequently, on March 16th, the Securities Commission announced that it would be investigating whether the stock market had been accurately informed as to Fortex's financial position in the last few months (Brett, 1994). Also in March, farmers, worried about not receiving payment, withheld stock aggravating the company's situation (McEwen, 1994; Birss, 1994a, 1994c; MacFie, 1994; Hutching, 1994). The farmers required payment guarantees which Fortex could not provide (Birss, 1994b).

During the company's last week, Seafield union secretary, Peter Binnie reported that the employees' morale was low (Birss, 1994c). Speculation and rumour peaked as the employees awaited news (Archibald and Topp, 1994). Then, on March 21, it was announced that a potential alliance with a Malaysian company, Seremban Securities, had failed (Brett, 1994). The same day Silverstream, Seafield and Tauranga closed and the company's share-price fell to 13 cents. The trustee placed Fortex into receivership two days later, March 23rd 1994.

After the company entered receivership, the union and employees offered a package which would have saved the company $15 million a year if the company was allowed to continue (Brett, 1994). However, on March 25 the receiver announced that, with debts of $160 million and realisable assets of $90 million, Fortex was too heavily indebted to attempt to trade out of receivership (Brett, 1994).

The company's assets have since been sold. The collapse of the company left 1,800 employees jobless, and the public, media and politicians wondering how such a high profile and seemingly successful company could fail.

5. The Post-mortem

The post-mortem started on the day of Fortex's collapse and is likely to continue for a considerable period yet as litigation regarding charges of forgery, false accounting and publishing false statements against the former managing director, Graeme Thompson continue to run their course. Amongst the reasons given as factors contributing to the company's swift collapse were a lack of financial management, inflexibility, debt funded expansion (Robb, 1994; Williams, 1994), and creative accounting (Brett, 1994). Many of these factors were only evident, and commented upon, post-collapse. However, they provide insight into Fortex's failure.

Fortex's unique labour agreement has also been viewed as a contributing factor to its downfall. In an interview, former managing director Graeme Thompson stated that:

> *"In the beginning this was our [Fortex's] greatest strength and was heralded by politicians as the catalyst for the introduction of the Employment Contracts Act. But in the end we were engulfed in the tide of industrial relations change we had precipitated and our labour agreements became our Achilles' heel" (Brett, 1994, p 48).*

Thompson realised this was a weakness but the agreement could not be changed as fast or as radically as management wanted (Brett, 1994). Further evidence is provided by Seafield Union secretary Peter Binnie. Binnie estimated that, when the company failed, Fortex's wage costs were 25 percent to 30 percent higher than its competitors and the workers' productivity was lower. This wage cost was essentially fixed because the workers were guaranteed a minimum number of weeks work per year. Therefore, Fortex, unlike its competitors, found it necessary to procure stock regardless of the price to utilise its workforce.

The wage problem was magnified due to the excess capacity that existed within the South Island processing companies. The South Island lamb supply has reduced by 20 percent in the last decade (Williams, 1994). In 1993, due to the severe storms, lamb numbers had fallen even lower to 15.5 million. The efforts of the three competitors to secure enough stock to fully utilise their plants caused a price war in 1993. This was not uncommon in the meat industry, with price wars also occurring in 1990 and 1991. However, 1993 was different.

PPCS, knowing Fortex was committed to purchasing animals to cover its fixed wage expense, purchased stock at very inflated prices (The Independent, 1994). Fortex followed suit. After a time PPCS pulled out, but in an example of poor management, Fortex continued buying animals at inflated prices after PPCS had stopped (The Independent, 1994). Lambs which were being purchased for $48 yielded only $40 worth of meat (Brett, 1994). Being comparatively small and financially weak, Fortex was financially crippled by the prices it paid for lambs. The banks took the opportunity to close the struggling company to reduce the industry's overcapacity problems and protect their larger interests in Fortex's rivals (Topp and Press Association, 1994).

Fortex's rapid expansion has also been criticised because of the amount spent on Silverstream and the fellmongeries (MacFie, 1994), and that its expansion was debt funded. Fortex's Seafield plant union secretary Peter Binnie asserted, after the collapse, that the Fortex's debt funded expansion *"...was getting out of hand"* (Brett, 1994). Similarly Alan Robb, believed that Fortex was always undercapitalised. Robb (1994) also calculated that Fortex's operations lost $39.6 million in cash in five years. Expansion when the company's operations were not producing a cash surplus meant Fortex was forced to borrow to pay its costs. This borrowing considerably added to the company's debt burden. Robb also questioned the accuracy of the valuation of inventory and assets (Brett, 1994).

The interim loss Fortex was going to post in 1994 consisted of approximately $30 million in asset write-downs, most of which was explained as an over-estimation of their market value (Brett, 1994). Similarly, $8.7 million was a reversal of a loan 'mistakenly' miscoded in the accounts as income. At this time the Serious Fraud Office began an investigation into the miscoded loan. In recent court hearings, more allegations of creative accounting, a deliberate overstatement of assets and understatement of liabilities to increase the company's profitability, were made (The Press, 1995a; 1995c). Furthermore, a former employee of the company claimed that treating loans as income was a common practice that had occurred for a number of years (The Press, 1995b; 1996).

Throughout its life, the company's profitability seemed assured because of its value-added, further-processing emphasis, yet this too has been criticised. The increasing size of the company meant that it had to find more markets for its meat. This proved to be a problem where the markets did not demand further processed meat (Brett, 1994).

In Fortex's case survival was, according to some critics, made more difficult with its dual responsibility to the sharemarket and farmers (Brett, 1994). Their competitors PPCS and Alliance were farmer-owned cooperatives. As such, their owners received their dividend in the form of high prices for their lambs. Fortex had to pay a similar price to procure lambs, yet also produce a profit and dividend to satisfy sharemarket investors.

Lastly, the company's management, and in particular founder and former managing director Graeme Thompson, were criticised for their role in the collapse (The Independent, 1994). Thompson, who now faces court proceedings, was viewed by friends and associates as having *"...become too powerful a figure within Fortex and was not challenged by those around him"* (Brett, 1994, p 57). They believed that *"his greatest strengths were as an innovator, an ideas man and a communicator, rather than a financial analyst"* (Brett, 1994, p 57). If the criticisms are valid Fortex, had many of the same weaknesses as its founder.

6. Conclusion

Fortex, the recipient of many awards and praise, was an innovator which departed from traditional meat industry practices. Its innovations and export-led approach was exactly what New Zealand was looking for in a country experiencing a period of economic rebuilding. As such it received plaudits from the media and politicians alike. Described as *"...the darling of politicians"* (Brett, 1994, p 52), Fortex changed the face of New Zealand industrial relations with the 1988 collective agreement with the Meat Workers Union being regarded as the catalyst for the Employment Contracts Act 1991. This agreement was just one of numerous positive qualities Fortex had and it seemed that the emphasis on innovation, efficiency,

expansion and quality, and the hyperbole surrounding the company, had instilled in the members of the company, politicians and the public the belief that Fortex was infallible. This belief was unfounded, and the most technologically advanced meatworks in the world, the adoption of vogue management practices such as TQM, and marketing offices throughout the world, could not stop Fortex from failing.

Chapter 8

Case Study: Employees and Distress

1. Introduction

Within Chapter 2, it was reported that non-managerial employees' opinions on the factors which caused a company to fail had seemingly not been utilised in previous corporate distress research. Yet assertions by Argenti (1976a), and an analysis of Altman's (1983) and McBarnet et al's (1993) research indicated that employees could potentially observe the symptoms of distress. However, Argenti (1976a) reported that employees could only observe non-financial systems of distress, which was anomalous to the observations found in McBarnet et al's (1993) work. Moreover, Argenti (1976a) also asserted that despite their ability to observe symptoms, employees could not determine that an organisation was distressed.

This chapter documents the results of interview process and reveals that employees may be far more perceptive than was previously believed.

2. Interview Sample Characteristics

The results displayed in the present and in the two following chapters are predominantly derived from 15 semi-structured interviews conducted with former employees from Fortex's Seafield plant.

2.1. Working Experience

The 15 interviewees shared a combined 92 years employment with Fortex, ranging from four to nine years and averaging at just over six. Hence, each employee worked at Fortex, (which existed for only ten years), for a considerable period of time. Furthermore, 14 of the interviewees were employed by the company prior to its 1990 public listing. As such, they were employed during the two distinct periods of Fortex's life and had the opportunity to observe the company over a period in which it changed significantly. Additionally, two employees had worked in other meat working companies and were able to compare the other enterprises with Fortex.

2.2. Positions Held

At the time of receivership the employees worked in a range of positions around the company, the most common being the slaughterboard (five respondents). Other positions included union secretary, (Peter Binnie), and working in the carton room, boning room or the packing room. In addition to Mr Binnie, the sample included one other union delegate who had held the position for one year. The respondents also worked differing shifts, the most common being Levels 1 and 3.[54] The range of work positions and shifts represented in the sample covers all of the major functions involved in the meat-processing component of the plant.

2.3. Shareholding

Of the respondents, 11 indicated that they either held, or were paying instalments on, shares purchased through the company's employee share scheme. Two had held shares but sold them in 1992. The remaining two individuals stated that they never held shares.

2.4. Summary

While the sample may be regarded as small, a diversity of employees were represented. The range of shifts worked, positions held and experience of the employees meant the sample, while not necessarily representative, offered a wide range from which employees information could be gleaned.

3. Employees' Perceptions of Fortex

Other than the two union delegates, who had more contact with management than the other employees,[55] the interviewees reported that they perceived the company as

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[54] Level 1 was the Monday to Wednesday day shift which was guaranteed 52 weeks work per year. Level 3, guaranteed 30 weeks per year, was the complementary day shift which worked Thursday to Saturday. Levels 2, (20 weeks per year), and 4, (15 weeks per year), were the night shifts which operated on the same days as Levels 1 and 3, respectively.

[55] From this contact, the union had formed the opinion that both the plant's and the company's overall management was poor.

successful, and well-managed. Most indicated pride at working for such a publicly and politically well-received company:

> *"From a personal point of view I was proud to work at Fortex. We were very well paid for what we did. We were a happy workforce. I think most people were proud to say they worked for Fortex."*

The company was believed to be 'going places' with employees citing market leadership, the numerous business and marketing awards, its innovations such as the attempt to achieve ISO accreditation, and its intended expansion overseas as justification for their pride.

3.1. Reaction Upon Receivership

For some of the employees, the pride and impressions engendered from the accolades and hyperbole surrounding the organisation contributed to a belief that it could not fail. Hence, reactions of shock, disbelief and disappointment were reported when receivership was announced:

> *"I couldn't really believe that a company that was said to have the great initiatives, and doing everything the right way, all of a sudden had gone so far down the tubes. We couldn't believe that. Nobody could really believe that."*

The disbelief was attributed to many factors. For example, in December 1993, when the company's management asked the employees for wage concessions and increased productivity, they made representations about the size of problem, and that it could be rectified. Initially all the employees expected that the concessions they had made, such as reducing holiday pay, speeding up the killing chain and working an extra half hour per day, would be sufficient to save the company. Many continued to believe their sacrifices would save the company right up until the day it failed.

Due to this misconception, and a fervent belief in the company, eight of the employees indicated that they were surprised that Fortex was placed into receivership. A typical response:

> *"Very surprised. As I say we didn't know a thing about it. Although you were starting to get an inclination that there was something because there was..."*

Conversely, five others responded that they were not surprised when receivership was announced:[56]

> *"I wasn't surprised because prior to that, about six months, the signs were quite visible and I probably would have been one of the ones that kept on saying that it was going to go under."*

One of those unsurprised was Seafield Union Secretary, Peter Binnie. According to him, receivership was the confirmation of an event which was signalled by growing uncertainty, particularly in the month prior to the announcement.

Binnie's identification of growing uncertainty is reflected in the above statements from both the employee who was surprised and the employee who was unsurprised at the time of Fortex's failure. The first indicated an inclination which was formed through the observation of changes in the area in which he or she worked. The second indicated signs as far back as six months prior to failure. The common ground between the two parties, that there were concerns which were observed or ascertained through their jobs, was also reflected amongst the other employees in each group. Of the total sample, 14 recognised that the company was distressed prior to its failure.

The difference between the two groups was the extent to which they believed that the company was struggling. For example, prior to the collapse, there was a multitude of rumours travelling around the company, some of which concerned receivership and failure itself. Those unsurprised indicated that rumour formed a substantial part of their reasoning. The surprised employees reported that they had heard rumours but had not believed them:[57]

> *"There were rumours going around–it's going to fail–this place is in trouble. But I don't really think that the average Joe Bloggs took it seriously enough. No, it can't happen to us, it can't happen to us, and that was the way I think they looked upon it."*

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[56] Two interviewees did not comment on their reaction.

[57] A detailed examination of the role grapevine information played in forming the employees perceptions is contained in Chapter 9, p 191.

The surprised employees knew the company was struggling but thought it would survive, the others believed it was going to fail. Hence, the employees who were unsurprised perceived that the company's position was worse that those employees who were surprised when the company was placed into receivership.

4. Employees' Concerns and Distress Events

During the course of each interview, employees were asked to identify any concerns they had about the way the company was operating at any stage of its life. Consistent with Argenti's (1976a) assertion that employees can observe the non-financial symptoms of failure, the 14 respondents who were aware that the company was distressed reported a range of factors which they found unusual or caused concern. Each identified at least one event which concerned them. The employees' observations were not restricted to non-financial factors but rather ranged from Argenti's (1976a) defects, to symptoms. Table 8.1 summarises the events identified by the employees.

Table 8.1: Distress Events Observed by Employees in Chronological Order.

Year	*Distress Event*	*Number of Observations*
1990	Construction of Silverstream	12
1991	Wastage and Inefficiency	2
1991	Management Turnover	0*
1991-94	Autocratic Leadership	1
1991-94	Plant Management	3
1991-94	Employee-Management Relations	2
1991-94	Heavy Infrastructure	2
1992	Planned Expansion	1
1992	Snow Storm	2
1993	Employee Share Issue	1
1993	Loss	0**
1993	Stockpiled Inventory	1
August 1993	Leaked Document	1
August 1993-	Procurement War	3
September 1993	Union/Management Meeting	2
December 1993	Employee/Management Meeting	7
December 1993-	Stock Shortage, Short Days and Lower Wages	11
January 1994-	Share Price	7
January 1994-	Increased Rumours	9
January 1994-	Reduced Morale	5
Feb-March 1994	T. A. Pacific: Change in Major Shareholding	4
March 1994	Unusual Events (Packing Bags, Bankers)	2
March 1994	Investigative Accountant	1
March 1994	Creditors Reclaiming Property	2

KEY: * The departure of Seafield's plant manager was mentioned in passing by two employees, but was not seen as a concern.
** The 1993 loss of $4.8 million was not reported as of concern by any of the interviewees. However, the interviewees indicated that some of their colleagues were concerned.

Predictably, the single employee who was unaware that the company was distressed observed or heard of no problems or concerns prior to collapse. Furthermore, he maintained that the other employees had no obvious concerns over the company's future. This assertion was incorrect. One potential explanation for this anomalous finding is that this employee may have been an isolate individual. That is, he had little informal contact with other employees.[58] However, the ignorance over the company's dilemma was not restricted to this individual. A small proportion of

[58] Indeed, this employee will be revealed as one of two isolates in the next chapter, which discusses the findings concerning the grapevine's role in distress.

employees did not believe the company was struggling, but rather that management was intentionally misrepresenting the company's performance in order to reduce the workers' pay and conditions. These employees were typified as traditional old-style union members who had worked at other meat processing companies.[59]

In total 22 events were reported as a concern. Two others, the departure of the plant manager and the 1993 loss, were not. However, management turnover is a symptom of distress which the employees observed, and the 1993 loss was viewed as a concern by others within the plant.

By identifying 22 distinct events over a five year time frame, the employees demonstrated a level of perception far greater than that proposed in the scant literature. As Table 8.1 indicates, most of the employees' observations occurred during the last 12 months of Fortex's life. However, there was one notable exception, the construction of the Silverstream plant in Mosgiel during 1990.

4.1. Pre-1994

4.1.1. Silverstream - The Big Project

Mentioned by 12 people, Silverstream's construction was the first event in Fortex's life which caused widespread concern amongst the Seafield workers. An interpretation of the reasons offered for such concern revealed two distinct themes. The first, and most common, was self-interest. The second was related to the plant's economic viability.

4.1.1.1. Self interest

Nine of the interview subjects indicated that due to its site and size, Silverstream was viewed as a potential threat to their jobs and financial security. Its construction was

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[59] The meat industry has traditionally had a strong and vocal union, and was characterised by repetitive management-union conflict. However, the employment agreements which Fortex achieved in 1988 signalled a power shift in the relationship between processors and the Meat Workers Union. These old-style union members were employees with experience in the confrontational approach previously common in the meat industry. Most of Fortex's employees had no experience with other companies and therefore had no preconceptions or prejudices against the management of a processing plant.

also a catalyst for change, with employees noting that after this period management played one plant against another. For instance, one respondent stated that:

> *"...as soon as that Silverstream plant was built that's when things started to change and you felt a bit uneasy about your own job, and maybe you wouldn't get a full year's work."*

The plant was situated near Southland which produces the largest pool of stock in the South Island. Traditionally stock from Southland was transported to the Seafield plant in Canterbury for processing. The employees realised that after Silverstream was constructed there would be little point transporting stock to their plant. Therefore, they expected Silverstream to reduce the number of animals they processed.

Despite workers being guaranteed a minimum number of weeks employment per year, a shortage of lambs could potentially affect their wages in two ways:

- Firstly, the minimum number of guaranteed weeks would be exceeded where lamb numbers were sufficiently high.

- Secondly, the employees were also paid on an incentive system. Hence, after a prescribed level, their daily wage varied depending on the number of sheep processed. Where lamb numbers were short, wages would be substantially diminished.

Initially the workers' fears were allayed when the managing director, Graeme Thompson, stated that there was sufficient stock for two plants, and that Silverstream would be operated as the seasonal plant. However, this did not eventuate. Silverstream, like Seafield, operated all year around and the employees' apprehensions over the new plant were proved correct. Even under normal conditions, Silverstream's operations affected Seafield in the 'shoulders of the season' where stock was short. In times of widespread stock shortages, such as in 1993, Seafield's throughput was severely reduced due to Silverstream's proximity to the largest supply of lambs.

The employees also reported that just after construction, stock was regularly transferred from Seafield to Silverstream. The inter-plant stock movement was a

common topic of conversation amongst the employees. From contact with a relative who transported lambs to the plants, one of the respondents' confirmed that animals were taken from Seafield to Silverstream. However, he reported that the stock was transferred depending upon what each plant was cutting at the time, or that it was required to cover occasional shortages each plant experienced. Moreover, the same respondent indicated that, while stock was occasionally taken from Seafield to Silverstream, the reverse also occurred. No mention of this was made by Seafield's employees who only focused on the negative aspect of inter-plant stock movement. The lack of speculation or comment about Silverstream to Seafield stock movements again indicates that many of the employees' concerns about Silverstream were essentially caused by self-interest.

4.1.1.2. Economic Viability

Silverstream's construction was regarded by five respondents as a concern at the time for three economic reasons.[60] Firstly:

> *"We couldn't really understand where all the money had come from for Silverstream and that's what made some of us think. I suppose in the back of our mind we thought with the money being spent down there where the hell did they get it all from after only being in business a short period of time."*

According to this employee, his colleagues shared the same concern over the amount of money spent on Silverstream and where that money came from. This comment was echoed by another employee, who asserted that there was:

> *"...a bit of concern when they built it and the cost at the time from some of the workers. I didn't understand quite what was going on because it was still early days for me, but some of the chaps that had been there a while were a bit concerned about spending that much money that they really didn't have. They felt they didn't have that sort of money to spend."*

These comments are unusual because the company's public listing in 1990 was for the explicit purpose of raising the capital necessary to build the Silverstream plant (FGAR, 1990). As approximately 80 percent of the company's employees were also shareholders (FGAR, 1990), they should have been aware that their investment had

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[60] Two of the interviewees indicated that they were concerned about the construction of Silverstream for both reasons. That is, the impact on their jobs and the financial implications for the company as a whole.

helped fund the expansion. Nevertheless, the expense involved in establishing Silverstream has been cited post-collapse as a contributing element in Fortex's demise (Brett, 1994).

The second concern was the period of time in which Silverstream was constructed. Three employees believed that the expansion involved in constructing Silverstream was too rapid, particularly when the size of the investment was considered:

> *"Going back a bit I felt the company had grown too fast. I could see that they had borrowed a lot of money to build Silverstream."*

Thirdly, a single employee, also concerned over Silverstream at the time of its construction, indicated both its cost and timing as the reason. However, in this instance a ratiocination was provided. The employee believed that the Silverstream expansion was undertaken in an inappropriate period where the existing plant, Seafield, was struggling and financial performance was poor:

> *"I was a bit concerned when they put money into building Silverstream because I actually thought what they had going, the lamb slaughter and deer slaughter at Seafield, was more or less just paying its way."*

While the respondent understood the benefits of having a plant in an area which provided the majority of the South Island's sheep, he was concerned about the financial demands the expansion placed on a company which was only marginally profitable:

> *"...I could see advantages of having a plant down south, but meeting the demands of finance, I couldn't see them doing it. Just off the top of my head I think it was something like $40m, I might be wrong there. At 10 percent interest we're looking at $4m in interest payments, but it would have been far more than that. The interest payments alone would have been staggering. It doesn't sound like much but when you've got a work force that are all earning in the vicinity of $18 to $25 an hour, when you're trying to keep that and buy stock and make money at the end, it doesn't stack up well. I had a feeling that they might have been biting off a bit more than they could chew."*

While the figures are not accurate, (Silverstream cost $52 million (FGAR, 1991), $30 million of which was capital funded (FGAR, 1990)), this employee's concern over the company's lack of financial performance when combined with such a large project is significant.

Silverstream, which more than doubled the company's assets, could be interpreted as Argenti's (1976a) 'big project.' After Fortex failed, meat industry analysts reported the plant's cost, over-capacity, and processing rigidity meant its construction was unwise and instead of contributing to the company's success, was an important mistake which led to its demise (Brett, 1994). The fact that the employees perceived the importance of analysing the plant's financial impact on the company, which was the subject of later criticism, indicates that they may be able to observe not only the non-financial symptoms of distress but mistakes which occur much earlier.

4.1.2. Expansion

Concern over Fortex's expansionary activities was not restricted to Silverstream, but extended to the 'grandiose' proposal that the company build a processing plant in the UK:

> *"We felt there was a quite a bit of tidying up here before that ever happened. It seemed for a fledgling company to be overreaching. That must make you vulnerable."*

While only raised by a single employee, this planned expansion was also reported to have caused some discontent amongst other employees. These feelings were held during 1992, the period in which the investment was first proposed (FGAR, 1992). The indication that some employees believed the company was expanding too rapidly, a point which is obvious in hindsight but received no external comment at the time, again indicates that, as insiders, employees may observe more than just the non-financial systems of distress.

4.1.3. Wastage and Inefficiency

In September 1991, the employees were threatened with a 10 percent pay reduction. In response, Binnie wrote a letter outlining union concerns over inefficiencies and wastage in the production process. Within the letter, directed to the plant manager, David Hearn, and the managing director, Graeme Thompson, Binnie *"...espoused ideas as to why the company wasn't performing and there were many matters that should be looked at before they looked at attacking the workers and the wages."*

The problems outlined in the letter were estimated to have caused $2 million in lost profitability. That is, if the plant worked at 100 percent efficiency, and all production was sold, the company's 1991 profit would have increased by $2 million, to $4.89m. However, Binnie was surprised at the reaction the letter received:

> *"What surprised me, and now with hindsight I can say with a deal of accuracy, was Graeme Thompson didn't want to know.... Thompson was just disinterested, as if to say yes we have received your letter, we have received your complaint, now go away and don't say anything about it."*

Later independent calculations performed by management verified that the inefficiencies had potentially reduced the company's profit by $2m. It took another two and a half years until the problems were resolved and efficiency neared 100 percent.

In a company lauded for its efficiency (du Chateau and Leggat, 1992), such wastage, and the impact on total earnings and cash flows is significant. Inefficient production contributes to a company's demise (Scherrer, 1988; Lingard, 1989), and it provides partial explanation for the company's poor profits and operating cash flows in the 1990 and 1991 financial years.[61]

The concerns over time wastage and inefficiency prompted the union to design and maintain an informal accounting information system.[62] However, like the employees' concerns over the construction of the Silverstream plant, the poor efficiency was raised where there was likely to be a direct impact on employees' pay packets.

4.1.4. Management Turnover

Six weeks after Binnie presented his letter, Seafield manager David Hearn left the company. Hearn's departure was remarked upon in Fortex's 1991 annual report which stated that:

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[61] However, as has been revealed post-collapse, even when the budgeted production levels were achieved, Fortex's high fixed wage costs meant that, compared to its rivals, it remained inefficient (Brett, 1994). At its peak, Fortex produced 13,000 units per week. For the same wage costs its rivals would produce 18,000 units (Brett, 1994).

[62] The IAIS will be examined separately in Chapter 10, p 225.

> *"Since balance date, David Hearn, General Manager at Seafield, left the employment of the company. Tribute must be accorded to the central part he played in the development of Seafield and for spearheading the introduction of shiftwork at the plant" (1991, p 10).*

However, the explanation of the departure provided in the annual report was inaccurate. Rather than the euphemism 'leaving the company', Hearn had been dismissed. The interview candidates indicated that Hearn's departure was not amicable. According to one of the employees:

> *"I think he [Hearn] was probably sick and tired of what was going on in the company and he decided to have a go on his own and he ended up getting escorted off the plant. He got locked out in the end."*

Furthermore, this same employee stated that, in his opinion, Hearn was unhappy with the direction the company was going, and the speed with which it was growing, and that after his dismissal, the locks to his former office were changed. While only being an opinion, it provides a potential explanation for his departure.

Alternatively, Binnie criticised Hearn's performance in the letter which Thompson received. He reported that *"[t]he plant needed leadership. That it needed to be a huge team effort, and that Dave Hearn, whether he liked it or not, was the captain of the team and he had to perform."* Thompson may have taken more notice of the letter's content than Binnie thought and dismissed Hearn for poor performance.

A change in management creates stress within an organisation and contributes to failure (Robb, 1986b). The dismissal of an executive member as the result of a dispute signifies a management function divided over the company's strategy and objective. Because of its sudden nature, a dismissal is a more stressful event than other management changes, such as a retirement, which may be planned for in advance (Robb, 1986b). If Hearn was dismissed because of a disagreement between himself and other executives, the event would have been likely to cause more distress within the company. However, regardless of the cause, the departure of senior management is an indicator of distress (Gilson, 1989, 1990; Hambrick and D'Aveni, 1992).

4.1.5. Management

The union delegates, and in particular union secretary, Peter Binnie, indicated that they were critical of plant and head-office management around the period in which Hearn was dismissed.

4.1.5.1. Graeme Thompson - Potential Autocrat

As reported earlier, Binnie was surprised at the reception managing director Graeme Thompson gave his letter which outlined production problems. Later in the interview, he remarked that:

> *"The whole way through Thompson was the kingpin and everyone fell in line with what Thompson wanted or said or did. It was always Thompson's baby."*

A managing director who fails to listen to advice, such as Binnie's letter, and dominates an organisation, which this quote indicates Thompson as being seen to do, is one of the crucial elements which underlies many company failures (Argenti, 1976a; Miller, 1977; Makridakis, 1993). However, even if Thompson had ignored the advice, Binnie's observation is only a single instance of an action consistent with autocratic leadership. Such an observation does not necessarily imply that Thompson ignored advice from his executive colleagues which would be necessary before he could be termed an autocrat. However, there were three other indicators which may also be attributable to autocratic leadership:

- Firstly, Thompson was perceived to be a dominant personality with one respondent stating: *"I certainly would prescribe to the opinion that he would have dominated the board. The board would not have dominated him."*

- Secondly, Hearn's dismissal was reportedly caused by a disagreement over the direction and strategy of the company.

- Thirdly, Hearn's replacement, Ian Graham, was reported to have been *"a bit of an idiot who wouldn't ask too many questions about the way head-office was running things."*

Hence, Hearn, who was dissatisfied, was replaced by a manager who was perceived as ineffective and would not question head-office's, and Thompson's, authority and decisions. These three instances support Brett's (1994, p 56) post-collapse report that *"...Thompson became too powerful a figure within Fortex and was not sufficiently challenged by those around him"*, and provided early evidence that Thompson, so often in the media limelight, may have been an autocratic leader.

4.1.5.2. Plant Management

The two union delegates reported a concern about the performance of plant management, in particular a 'gulf' between local and head-office management. This gulf had two components, strategic direction and communication. The differences in strategy were rectified with the dismissal of Hearn and the appointment of Ian Graham. However, Graham was perceived to be incompetent, spending most of the afternoon asleep in his office.

Despite the a new plant manager, the communications gap remained. According to the employees, Graham and other plant management were poorly informed and did not seem to be aware of what was happening within the company. During the last six months of the company's life plant management were unable to answer many of the questions the union and employees raised. To avoid this problem the union dealt directly with head-office management in Christchurch.

The communication gap between head-office and the Seafield plant's management was apparent when the company collapsed. Plant management did not seem to be any more aware of the severity of Fortex's distress than many employees. Several indicated that Graham was as surprised and distressed upon the announcement of receivership as themselves, and was heard to say that he did not know the company was going to be placed into receivership.

Earlier Graham had given assurances that the company would not fail. One employee made the following statement to support his assertion that Graham was incompetent:

> *"One of the things I questioned strongly ... the general manager [Ian Graham] of the company then came to us at the end and said don't worry there is no*

> *problem. I couldn't believe that, I wasn't the only one that had these questions buzzing around, I wasn't the only one that could see these stockpiles of meat, that knew about the high prices being paid, I cannot believe that he did not know that company was in trouble."*

If Graham was incompetent, his ineffectual management of the Seafield plant would have contributed to the company's demise. However, the above comment also raises two other possible scenarios. Firstly, the lack of information plant management received is consistent with autocratic leadership and power-hoarding by the senior management. Secondly, a reduced supply of information to plant management and employees could have been an attempt to hide the severity of the company's problems. Often in distress, senior management try to conceal problems (Argenti, 1977). Hence, the lack of information held by plant management was a significant indication of problems within Fortex.

4.1.6. Employee/Management Relations

The employee-management relationship at the plant was reportedly strained by two events. Firstly, two employees indicated there was widespread concern that union delegates had a tendency to be offered jobs as foremen. From their perspective, this placed the company in a superior position in wage negotiations as they had former union representatives who 'knew the answers'. Upon leaving their role as delegates, these foremen were treated differently by the other employees.

Secondly, one of the two employees also reported that plant management was difficult to deal with, particularly regarding their work and conditions. The employment contract under which the employees worked contained provisions whereby re-work or less than full speed production could result in wage deductions. This particular employee believed that they had wages deducted for trivial reasons. Furthermore, he believed management took the workers for granted. However, this received no comment from other employees and no mention was made of the bonuses made when the employees exceeded expectations. Similarly, union delegates did not make any reference to management difficulties in this respect. Therefore, despite Robb (1986a) and Lingard (1989) reporting that labour relations difficulties contribute to distress, this single observation is likely be insignificant.

4.1.7. Heavy Infrastructure

From their position inside the company, and because they were also shareholders, two employees felt that the company was overburdened with salaried staff:

> *"As workers we felt they had far too many salaried staff on plant. We felt they had too many in the office. That was from a shareholder's point of view. We spoke of that a lot as workers just around the table at smoko. Saying well what the hell does he do? He does F all. There was a lot of that so definitely they were over-staffed in the salary point of view. I always personally felt that."*

For example, one employee reported that Seafield had 13 people in sales whereas the new company which subsequently opened at the Seafield site had only one. While this is a dramatic example, there are substantial differences between Fortex and the new company. Fortex was market driven, producing specialist products, and also produced a much larger volume of product.

A week prior to receivership, Fortex's board of directors was considered too large and, like many other facets of the organisation, needed streamlining (McEwen, 1994). However, in a distress context an inappropriate number of staff appears to be unmentioned. It is feasible that an excessive number of employees, who serve no function, could contribute to distress through high wage or salary costs. However, what would constitute excessive is open to wide interpretation. By itself, 13 people in sales is unlikely to contribute significantly to distress unless, like the board of directors, the overstaffing was common to the whole company.

4.1.8. The 1993 Share Issue - Cash Flows, Leverage and Financial Structure

A single person highlighted the 1993 offer of shares to the employees as the initial time in which her concerns originated:

> *"Well I was quite suspicious because the share offer, you know, that they offered us didn't sound very convincing to me and I happened to mention it to the guy Mullens [sic] and I said that they sounded quite desperate selling them to me. And I said well its obviously going under, are we in financial difficulty? And he said if I thought that don't buy the them then. So I said I won't. So I didn't."*

She informed her work colleagues of her concerns. However, they disagreed, and were not at all concerned over the share issue. They had no reason to be. The share

issues had occurred in each of the last three years and were seen as commonplace. However, it was the financial controller's, Michael Mullen's, demeanour and not just the share issue that raised the concerns. While the 'obviousness' of the company's financial position is debatable, and is undoubtedly influenced by hindsight, that this interviewee found the attitude of Mullen selling the shares unusual, is worthy of further attention.

The July 1993 share issue, which was to be the last offer made through the employee share scheme, occurred near the end of Fortex's 1993 financial year. The year which finished on August 31, saw Fortex post its worst financial performance, a $4.8 million loss. Due to the loss, the planned expansion into the United Kingdom was postponed. Furthermore, Fortex was in a period of consolidation. Hence, this share offer was made in a time where major capital expansion was not planned to be undertaken.

While share offers are made by successful firms, the identification of this as a concern at the time, even if by a single individual, is interesting in hindsight. Fortex struggled throughout 1993 and was shown by Robb (1994) to have poor cash flows and be overleveraged (Brett, 1994). Organisations have a variety of ways to raise additional financing. However, where an company is overleveraged debt funding may be unavailable (Brigham and Gapenski, 1991). Hence, they may alternatively liquidate assets or sell capital stock. As such, selling stock, except where it is utilised for long term capital expansion, is often accepted as an indicator of a company which is financially unbalanced or struggling.

4.1.9. The 1993 Loss

Posited as a financial indicator of distress (Giroux and Wiggins, 1984) the 1993 loss of $4.8 million reportedly caused disappointment amongst employees. The employees felt they had worked hard during that year, yet their effort was not reflected in the company's financial performance. While disappointing, the loss was perceived to be small, and consequently was not reported as a concern by any of the interviewees. However, two interviewees reported the loss did engender concern amongst some of their colleagues.

4.1.10. Snow Storm

The 1993 loss was attributed to procurement difficulties caused by a severe snow storm which occurred in the 1992 lambing season. Thompson attempted to rationalise the effect of the storm away, stating that:

> *"The overall effect of this on Fortex will be diminished, however. This is because our suppliers are spread throughout the South Island, and lambing takes place over a number of weeks. Bad weather only affects a proportion of farmers at any one time" (FGAR, 1992, p 10).*

However, the effect was much worse than Thompson predicted. The storm, an industry specific natural environmental event which contributes to distress (Milburn et al, 1983; Dunn, 1986) affected the suppliers, (itself another industry specific event (Milburn et al, 1983)), so severely that Fortex's throughput was reduced by half a million lambs (FGAR, 1993).

The employees were aware that the storm was more severe than Thompson had publicly stated. Binnie was a farmer and therefore saw the impact first hand. Most of the other employees had relatives or friends who were farmers. Furthermore, employees from the plant had also assisted farmers to move stock before, and clean up after, the storm. The employees related examples where a farmer had lost all but three sheep from a mob of 486. They understood the storm had caused horrific stock losses:

> *"A lot of the guys from down there went out and helped the farmers and that. It was a big concern because it was going to affect our living, and the big lamb loss, well we knew they would have to pay more for the lambs anyway because they were scarcer."*

The storm, which is also a Category C life event (Robb, 1986b), affected Fortex's profitability significantly. Fortex was in a poor financial position at the end of the 1993 financial year. The next year was Fortex's last. The loss sustained in this period severely weakened the company to the extent that it could not survive the intense competition over lamb procurement in the 1994 season.

4.2. 1994: The Year of Collapse

In general, the employees became concerned as the company entered the 1994 financial year. From August 1993 until the company's demise eight months later, 12 of the 22 events which the interviewees found concerning were reported. These 12 events accounted for 54 of the 81 total observations.[63]

The year started with the union receiving information that changes in the employees' pay and conditions were being considered.

4.2.1. Leaked Documents

In August 1993, Peter Binnie reported that, through informal means, the union received leaked information from a document prepared by the board of directors. The document outlined 13 points to reduce employees' wages which were necessary for the company to become profitable.

Binnie confronted head-office management with the proposition that the document existed. The existence of the document was denied at first. However, within a week he was shown a copy of it by a manager. According to Binnie this was the time that he began to get concerned.[64]

4.2.2. Union/Management Meeting

Soon after Binnie received the leaked document, in September 1993, the union delegates from the Seafield and Silverstream plants were summoned to a meeting in Oamaru. Also present were managing director, Thompson, the general manager of group operations, Stuart MacIntosh, and the general manager of corporate development, Steve Mander.

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[63] The information was presented in Table 8.1, p 152 of this thesis.

[64] As will be seen later, each individual employee's concerns originated at different points in time.

At this meeting, a month after the financial year in which a $4.8 million loss was incurred, management indicated that the company had to improve its earnings. To do so they requested union assistance to improve the productivity of both plants. This was the first official notification of the severity of the company's financial position and could be viewed as the presentation of financial symptoms. Together company management and union delegates developed an agreement which was would increase productivity throughout the plant.

This meeting confirmed Binnie's concerns which originated with the leaked document. After this period the union took more notice of the company's position, and began monitoring changes in share prices and shareholdings.

4.2.3. Management/Employee Meeting

In December 1993 another meeting was called. Thompson informed the employees that the company was struggling. The reason for the struggle was yet another procurement war, the third in four years. Due to intense competition Fortex was paying between $70 and $100 per lamb.[65] However, the problem was said to be short-term. Thompson requested the employees' assistance to save money and sustain the company through a 'rough period.'

The joint management-union plan to increase productivity was revealed. The plan involved speeding up the processing chain, a reduction in holiday pay and working an extra half hour a day without a wages. A small minority of employees wanted to reject the proposal believing that the company was using it as a ploy to reduce wages. However, a majority vote prevailed. The employees accepted the plan to assist the company, but the conflicting opinion between the two groups resulted in decreasing morale amongst the workforce.

Of the seven employees who commented on the December meeting, six indicated that it was the point which their worries started. Again self-interest was also evident.

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[65] In the 1990 and 1991 financial years the average price Fortex paid for lambs was approximately $34. In the subsequent two years annual reports no further mention was made of the price.

The extra production was viewed as a pay cut which was an additional reason why the employees were concerned. Despite any concerns, the employees believed that as a result of their efforts, the company was going to recover and again be successful:

> *"Well we were told we needed to tighten the reign and we had to do some things to help the company out. But never any inkling of what finally came out in the last few days of Fortex."*

The one interviewee who stated that he was not concerned after the meeting, asserted that the agreement *"looked good in the media on the employees' and union's part."* He also believed that management *"knew what they were doing"* and the company would recover.

4.2.4. Procurement War

During the 1994 financial year, Fortex was involved in a fierce procurement war which saw unrealistic prices being paid for lambs (Brett, 1994). In some cases the prices paid were above that which the processed meat could be sold for (Brett, 1994). For example, Brett reported that during the Christmas 1993 period, Fortex and its rivals, PPCS and Alliance, purchased lambs for prices in excess of $48, which was $8 more than the market would pay for the meat. However, the employees indicated that the $48 figure was conservative.

At the December meeting in 1993, the employees were informed that Fortex was purchasing lambs for between $70 and $100. In a period where a lamb would only yield $40 of meat, Fortex was purchasing lambs at twice their realisable value. From this evidence it is obvious how Fortex incurred the $30 million inventory revaluations which were a component of the 1994's predicted $45 to $50 million interim loss.

Three employees reported that they were aware of the inflated prices paid and that the procurement war had occurred for the duration of Fortex's last season. They also identified that Fortex's major protagonist was PPCS. Fortex had attempted to head PPCS off in the market in an attempt to maintain its market share. However, in doing so, Fortex's stock buyers resorted to purchasing inferior quality lambs. Therefore, as well as purchasing lambs at prices more than double those paid three

seasons ago, and twice what the market would pay for them, Fortex was purchasing lambs of poorer quality than before. This example indicates the severe effect the price war was inflicting upon the company which, at the time, was financially weaker than its major procurement rival, PPCS.

Despite the high prices and lower quality of lambs, the employees were pleased that the company attempted to maintain its market share:

> *"Oh yes everyone was aware of that [that Fortex was paying considerably higher prices than their competitors], everyone was aware of that. But I guess on one hand we didn't mind because we were getting the stock to kill."*

Hence, the employees interviewed recognised that Fortex was involved in a battle with PPCS. However, while competition is an industry specific event which contributes to company failure (Sharma and Mahajan, 1980; Makridakis, 1991; Greatorex et al, 1994), none of the respondents saw PPCS's actions as threatening the company at the time:

> *"We knew the company must have been under pressure, but then no-one sort of knew what the profitability of lamb was."*

Post-collapse, a 'conspiracy theory' was expounded whereby PPCS used its superior financial position to inflate prices for the specific purpose of harming Fortex (Brett, 1994; The Independent, 1994). However, the employees only became aware of that scenario when hearing industry rumours *after* the collapse. Through such means, they also heard that PPCS were produced price schedules containing prices at which they had no intention of purchasing lambs. Fortex relied on such schedules and set their prices higher, needlessly wasting money.

4.3. Symptoms of Distress

4.3.1. Stock Shortage, Short Days and Lower Wages

PPCS's actions were only one of four reasons which contributed to Fortex's inability to procure sufficient stock in the 1994 financial year. The other three reasons were that:

1. The stock numbers had not recovered from the effects of the storm in the 1992 season.

2. Due to favourable weather the pastures were lush. Therefore, farmers were holding onto their lambs longer so they would increase in weight.

3. In the last two months the farmers became reluctant to send in stock because they were concerned that they would not receive any payment.

4.3.1.1. Short Days

The employees became aware of the difficulty Fortex was having procuring stock. It was December 1993, the peak of the season. In previous years the plant had been operating at full capacity. In this year, the amount of lambs processed was reducing each week. The employees' days were getting shorter. Short days meant reduced wages. One interviewee detailed his rising concern:

> *"...and then toward the finish I got concerned, I even talked to foremans [sic] about it. Peak of the season's when other works are at their peak, prior to Christmas and just after Christmas when the new season was underway, other works were at peak capacity, we were getting short days, short weeks.... Three day weeks in the peak of the season–and I said to foremen that there is something wrong with this company. It started to get an eerie feeling around the whole plant. No trucks coming in, no stock going in, it just got us concerned that something was not right."*

Unsurprisingly, the short days and reduced wages were indicated as a concern by 11 of the 14 employees who identified concerns of any form.[66] However, they could not understand why Fortex was experiencing such trouble purchasing stock when they were aware that their competitors were having no such problems:

> *"We were getting a bit surprised because the other works started picking up a wee bit.... Out of our three days a week we were sort of only doing a day and a half, or not even that some days, and they [the PPCS plant Fairton] were sort of getting four days a week."*

The information on Fairton's processing came informally from friends and relatives who worked at the rival company. Other employees reported that they knew PPCS

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[66] Remembering that one employee had absolutely no concerns prior to the company's failure.

was processing more with one stating *"...we couldn't figure it out as to where the stock shortage was, you know, because other works were doing okay."*

The volume of stock steadily decreased. In the last month to six weeks, the shortages became so severe that the agreement forged in December 1993, allowing for extra production, became ineffective. There was simply not enough stock available. During this period the minimum daily quota was impossible to attain. The company supplemented the employees wages to make them up to the minimum payment levels.

4.3.1.2. Farmers

The farmers' reluctance to send stock in became more pronounced towards the end of the company's trading. They completely stopped providing stock two weeks prior to the collapse, requesting guaranteed payment before they would consider re-supplying Fortex (Hutching, 1994; MacFie, 1994). These guarantees were not provided. Argenti (1976c) reports that suppliers becoming suspicious and restricting delivery is a non-financial symptom of distress.

The earliest media coverage of farmers' concerns was Tuesday March 15, 1994 (Birss, 1994a). However, five of the employees indicated that they were aware of the farmers' reluctance up to two months prior to receivership:

> *"Some of the people that actually worked out there at the time were on farms or had dealing with farmers. They were letting me know then that they weren't going to send the stock in. They didn't feel that Fortex were going to pay them."*

Hence, employees identified this problem through their inside position prior to external media coverage. These employees identified two reasons given for the farmers reluctance to provide lambs. Firstly, that some of the payments for stock were received late:

> *"[t]here had been some delays to payment. Because traditionally the meat industry pays 14 days later. So whatever happened people had to make a judgement that everything was going to be okay in 14 days time for them to get their money and obviously they weren't prepared to take that risk."*

Secondly, within the last few weeks there was a general feeling in the farming community that all was not well with Fortex:

> *"I think there may have been a bit of a whisper out in the community before it became official because it didn't take long for most farmers to know that they shouldn't be sending their stock there."*

4.3.2. Stockpiled Meat

Fortex's annual reports indicated an increasing inventory value each year. Of the company's proposed 1994 interim loss, up to $30 million was due to inventory write-downs (Brett, 1994). The excessive prices paid for lambs in the early part of the 1994 financial year undoubtedly contributed to the write-downs. Moreover, court proceedings have also revealed that the inventory was purposely miscoded to inflate stock levels and profitability (The Press, 1995d). However, not all of the inventory consisted of over-valuation. Between 1990 and 1994 there was also an increase in the physical volume of inventory held by the company.

Three interviewees indicated that they were aware of the high inventory levels. One had first hand knowledge from his position in the shipping office. The other two had heard received information from other employees within the company regarding the inventory levels. One of the two who gained information from other employees reported that:

> *"Some of the guys from the chiller said 'we've got a big lot up at Ashcold.' It was filling up. You know there was always an excuse like the ship was coming or something else, an order had been cancelled, and they were trying to find new markets."*

The excuses provided meant those that heard such information were not concerned about the levels of stock. Conversely, the one employee who worked in the shipping office was surprised at the amount of stock remaining unsold and stated that:

> *"We didn't seem to have large quantities of stock going out. We had large stockpiles of meat, and I mean stockpiles of meat dating back years. I can't see that as being good business."*

He identified the inventory build up as conflicting with public perception, and, in particular, the awards Fortex was winning for its marketing strategies:

> *"But to me what they were doing was sending over some pretty prime cuts of meat to markets overseas, but other cuts of meat were not going anywhere they*

> *were just sitting in boxes in freezers. It wasn't just lamb either, it was venison as well."*

This respondent also identified that, as well as the inventory level being large and increasing in size, much of it was old stock. Some meat remained unsold and reached its 'use by date.' Furthermore, it was not uncommon for meat that left Seafield to come back a year or two later for re-work in attempt to find another market for it:

> *"It seemed like a bit of a juggling act at times, you know. Sometimes the meat would be here then it would go and you would think it would be sold somewhere but I think it was just a matter of moving it from A to B, between there and to Ashcold or Hornby wherever. I think it was just a matter of manoeuvring this stuff around."*

This interviewee's concerns were reportedly shared by most of the other employees in the shipping office, and freezer and chiller areas. These workers repeatedly questioned management as to why, if the company had all these markets overseas, they had so much in storage. Typical responses were that *"[w]e're making ends meet. This will sell eventually."* However, despite reassurances, the observation of stock past its use by date and other stock one or two years old, was regarded as a concern. In a company which received accolades for its exporting expertise and its marketing focus, the inability to sell stock before it reached its use by date would have caused even more concern if it had been known by parties external to the company.

In itself, an increased level of inventory is a non-financial indicator of distress (Argenti, 1976a). However, in this instance a portion of the stock was also old, at the extreme being past its use by date. As such it could constitute Argenti's (1976a) outdated product. An outdated product is one which has not changed to meet customers needs. Some of Fortex's inventory did not meet market demand and therefore remained unsold for years.

The increasing stock pile has two other implications. Firstly, Fortex's marketing strategies, which were geared towards the high quality cut of meat, were neglecting the less valuable cuts. Alternatively, its marketing personnel were having trouble finding buyers who wanted such cuts. Poor marketing strategies or producing goods

for which there is no demand contribute to the failure of any organisation (Scherrer, 1988; Lingard, 1989).

Secondly, an increase in inventory levels is often an indicator of a company which is overtrading in an attempt to increase in size. In itself an increase in inventory is not definitively linked to overtrading (Robertson and Mills, 1991). However, at the same time, Fortex was producing very low profits while substantially increasing turnover. These three elements in conjunction would seemingly indicate an overtrading company.

4.3.3. Sharemarket Activity

4.3.3.1. Share Price

Posited by Argenti (1976a) as a non-financial sign of distress, decreasing share price was a factor which was purportedly observed by the distressed company's accountants. However, in this case the employees were closely monitoring the share price both individually and through updates provided at work by the union.

For Binnie, monitoring the share price began after the union/management meeting in September 1993. The union believed the shares were undervalued and should have been priced at somewhere about the $1 to $1.20 range. Hence, when they price fluctuated in January and plummeted in February and March, the union became concerned and checked the price even more frequently:

> *"At one part of it there we [the union] were monitoring the share-price about every hour. We were checking on that. We kept the workforce fully informed on an hourly basis as to what was happening with the shares."*

Six other employees mentioned the falling share price as a significant indicator of how the company was performing.

There were several reasons given as to why the share price was monitored so closely. One employee asserted that it indicated the company's viability or whether they could be open to takeover. Another responded that:

> *"We saw the share price as being a pretty useful barometer to those people, particularly the institutions, with their ear to the ground. If anything untoward*

was happening they would be unloading [shares] and that appeared to be what they were doing."

Another potential reason why employees monitored shares was that 11 of the interviewees held or were paying off shares when the company failed. As such they were assessing the decreasing value of their own investment, which for many was going to be used for superannuation purposes. By failing to sell their shares, the employees seemed unconcerned about their investment. However, there are other potential reasons why the investments were not sold:

- Firstly, those employees who were paying their shares off in instalments had no option to sell the shares because until the shares were fully paid they did not receive the share scripts. However, they could have requested that their payments be stopped.

- Secondly, it was not worth selling shares in the later months as the price was too low.

- Thirdly, in many cases the shares were for superannuation purposes and not intended for sale in the near future anyway.

- Fourthly, many continued to believe that the company would survive and the share price would increase again.

Within the last few months, the interviewees also reported that they knew of several employees who had actually purchased shares, which they held when the company failed. Conversely, two individuals who purchased shares during the company's last month recognised the severity of the company's position and resold them. One of these individuals, an employee, sold his shares based on a rumour. In a somewhat unusual action, this employee continued to hold shares which he had purchased through the company while selling the additional shares:

"I also bought some more shares in the last couple of weeks because I thought we might be able to get out of the woods, and I bought them at real cheap rate and I actually sold them again two days later when I got... I sort of got a little bit of information from somebody I maybe shouldn't have and I sold them again and didn't lose anything thank God."

Therefore, there is conflicting evidence as to the significance of the share price to employees. Those who perceived the company as not going to fail may have held or purchased more shares, while others who were more concerned attempted to minimise their losses where they could.

4.3.3.2. T. A. Pacific

There was one specific share market event which was mentioned by four employees as first allaying and then contributing to their feeling that the company was in trouble. That event was the purchase and subsequent resale by T. A. Pacific of its 13.92 percent investment. Initially the investment was a signal that the company was going to survive:

> *"There was concerns but I think optimism sort of overshadowed it, especially with that T. A. Pacific business in the wind as well. We thought we had a big reprieve."*

Posited by Robb (1986b) as an event which causes distress, in this case the change in a major shareholding was a significant indication that the company was already severely distressed. When the investment company sold its shares two months later it was to provide the employees with their first definite signal that the company was failing:

> *"When T. A. Pacific, or whatever they were, came on the scene that sort of gave us a false picture and by the time that had all unravelled itself the wheels had fallen off properly."*

None of the four employees knew from where they heard the information about T. A. Pacific. When questioned one stated that *"[s]omebody had told me so it must have been a rumour, you know."*

4.3.4. Morale

The combined effect of the falling share price, the reduction in T. A. Pacific's investment and lower wages due to shortages of lamb, caused employee morale to fall. One union delegate, who was in a position to have a contact with a wide variety of employees, reported that morale in the last few months was 'shocking':

> *"Just the fact that we weren't getting full weeks any more, everyone was ****** off about that at the start, and there were two sides at work. The ones*

> *that thought the company could fall over and the side that thought they're just having a go at us. It's just lies and anyone who believes them are just gullible idiots. So amongst the workforce there was a lot of angry feeling. One side didn't believe the other, so it broke up friendships and workers were arguing about what was right and what was wrong."*

The other employees were evenly split. Four believed morale decreased over the last months. Five asserted that it was the same as normal.[67] Those who identified that their own morale was lower than normal attributed it to the lower wages which they were receiving. Hence, once again morale, a non-financial symptom of distress (Argenti, 1976a; Scherrer, 1988), was related to concerns over the employees' jobs. In this case, it was the reduced wages and the potential threat that they would lose their jobs altogether. Alternatively, another employee branded those with low morale pessimists who would always believe the worst case scenario.

4.3.5. Rumour

Morale is governed by an organisation's grapevine (Davis, 1953; Arnold, 1983). The grapevine communicates information via rumour. At the time morale decreased, nine employees indicated that there was a commensurate increase in the level of rumour within the company.[68] Some of the rumours concerned takeover threats and receivership and therefore could be construed as symptoms of distress.

4.3.6. Unusual Events

A few weeks prior to failure, bank representatives toured the plant. One employee reported this event as unusual:

> *"Macintosh [the General Manager of Group Operations] bought some of the bank guys through. They just gave the total show away by the look on their faces. You just sort of looked at them and you read body language and I just myself thought it doesn't look good because this has never happened to us."*

Similarly, one employee, who worked in the packing room, identified the that there was a change in the delivery method and the quantity of packing bags ordered:

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[67] The remaining 4 interviewees did not comment on morale.

[68] The interrelationship between rumour and morale is examined in detail in Chapter 9, p 199.

> *"I was in the packing area at the time...boxes of bags were being airmailed down instead of bulk orders. Instead of palettes of bags you'd get the odd one coming though airfreight."*

The departure from standard practice was unusual enough to have caused concern and provided this employee with more evidence that 'something was wrong.'

Both examples suggest that unusual events and unexplained departures from standard practices, like the situation with the packing bags, are observed by employees. Some of these unusual events may be symptoms of distress or indicate distress. For example, with the benefit of hindsight, the interviewee concluded the change in packing bag delivery occurred because the company was struggling to meet its expenses.

4.3.7. Appointment of an Investigative Accountant

The appointment of Michael Stiassney, an Auckland based accountant, on March 12 1994 to investigate the company's financial position was indicated by the union as an event which signalled that the company was in trouble. Through 'keeping their ear to the ground,' the union found that Stiassney's report was unfavourable. However, the union did not release that information to the employees because *"[w]e had to be very careful what we said because if we said the wrong thing that could have materially affected the sharemarket."*

4.3.8. Companies Reclaiming Property

A fortnight prior to the appointment of the receiver, Binnie noted an event which to him confirmed that the company was going to fail:

> *"I guess for me one of the most telling signals was about a fortnight prior when, on the Friday afternoon, I learnt that one of the local carrying companies had been instructed to come out to the plant here and uplift all of ICI's chemical products that hadn't been paid for. So when that happened well I guess I assumed that we were getting too close."*

This information was spread via the grapevine around the company. For example, another employee heard that:

> *"... then you got a whisper that ICI were trying to grab chemicals back. That was prior to the actual receivership and I think an oil company came and took*

> *some fuel back as well. So they knew, the company knew that it was pending, and also these other companies must have known as well."*

The reclamation of unpaid goods is a recourse taken by unsecured creditors who believe a company will be unable to pay its debts. While not mentioned in previous research, it is an obvious symptom of distress.

4.3.9. Fraud and Creative Accounting

There were several potentially fraudulent events which were revealed after Fortex failed. Such events included loan 'misclassifications', miscoded inventory, and superannuation, union fees and medical insurance which, having been deducted form the employees' wages, were not forwarded to the appropriate organisations.

Each interviewee was asked if they had any idea that these activities had occurred. One employee reported that:

> *"I think before we even closed down this rumour passed around that certain loans had been misclassified or whatever, you know things were not done properly."*

However, this rumour must not have been widespread or, more likely occurred after the collapse of the company, because no other respondent indicated it as occurring at all. The union secretary, Peter Binnie, stated that *"[o]bviously if we had known about the superannuation or any of the medical funds or any of that stuff we would have jumped on that smartly."* If such a rumour was being spread, the union, the employees' advocate and a group which reportedly knew more information than the other employees, would have been informed.

4.4. Summary

All but one of the 15 Fortex employees interviewed observed one or more events which caused them concern. These concerns had counterpart factors, or could be linked to factors, proposed in previous corporate distress literature. The factors ranged from defects, Thompson as an autocratic leader, mistakes, Silverstream as Argenti's (1976a) big project, to a multitude of non-financial symptoms. Therefore, employees are not only in a position to identify the symptoms of distress, but also

elements which contribute to, or are the initial cause of, distress. However, in this case observation did not necessarily correspond with the realisation of the event's role in the collapse.

5. Comparison of Employees' Observations Against Argenti's Assertions

5.1. Observing a Multitude of Non-Financial Symptoms

Argenti (1976a) submitted that employees were in a position to observe a wide variety of non-financial symptoms. He was correct, in this case as the employees noticed 10 significant non-financial symptoms of Fortex's distress. Those symptoms were the:

- stockpiled inventory;
- the leaked document;
- stock shortages, short days and lower wages;
- falling share price;
- increased level of rumours;
- reduction in morale;
- reduction in shareholding of T. A. Pacific;
- unusual events (change in packing bag delivery method and the appearance at the plant of Fortex's bankers);
- appointment of an independent accountant to assess the company; and
- creditors reclaiming property.

However, Argenti (1976a) underestimated the perception of the blue-collar worker. In this case, the employees actively monitored the share price, maintaining a vigilant

watch on its fluctuations. While a significant departure from his statement that a company's accountants observed a falling share price, this could be partially attributed to the employees' dual role as shareholders in the company. However, it was just one of a number of differences between Argenti's (1976a) claims, and the findings of this case.

5.2. Diversity of Factors

While Argenti (1976a) indicated that employees could observe the non-financial symptoms, he failed to comment on their ability in other areas. This is a significant omission since, while the majority (41 of 81)[69] of the employees' concerns were non-financial symptoms of distress, the employees in this case also observed the financial symptoms of distress, such as the loss in the 1993 financial year, and were formally told that the company was financially struggling at the Christmas 1993 meeting.[70]

The employees were also aware of external environmental factors which influenced the company, such as the snow storm and competition. These factors are included under Argenti's (1976a) failure to respond to change category. The failure to respond to change is one of three defects which occur at the beginning of the distress process. It is preceded only by defective management, the most crucial of which is the autocratic chief executive. From the employees' observations, the managing director, Graeme Thompson, may have been an autocratic leader. Hence, the employees potentially observed, albeit without recognising they had done so, three fundamental defects which cause corporate distress.

The employees also indicated Silverstream and the company's expansionary goals as overly ambitious, both in the financial expense involved and the time in which they were planned. Both can be interpreted as Argenti's (1976a) big project.

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69 The events counted as non-financial symptoms were: the stockpiled inventory; the leaked document; the stock shortage, short days, lower days; reduced share prices; increased rumours; reduced morale; T. A. Pacific, unusual events, the appointment of an investigative accountant and creditors reclaiming property.

70 This event and the union/management meeting were classified as financial symptoms because it was at these meetings that Fortex's poor financial position was presented. Note however, that post-collapse the employees recognised that the financial problems had been understated at these meetings.

Furthermore, the share issue has tenuous links with overleveraging and financing problems, and stockpiled inventory is symptomatic of a company which is attempting to overtrade and/or suffers from poor marketing. Each example falls within Argenti's mistake category which forms an interim step between the origin and eventual occurrence of failure. Therefore, employees are in a position to identify events which range from defects to the symptoms and the final nose-dive of an organisation. However, the employees did not link any of their observations which were not symptoms of distress with Fortex's demise at the time the company operated.

5.3. Identification of Distress

Fourteen of the fifteen employees interviewed recognised that the company was distressed. The employees reported that most of their concerns originated either at the December 1993 meeting with management (6), or the shortened working days and reduced wages (5). They also reported that non-financial symptoms, such as T. A. Pacific's withdrawal, creditors reclaiming property, the appointment of an investigative accountant, and the falling share price, contributed to their feeling that the company was distressed. Argenti (1976a) claimed that employees are not in a position to assess the distressed position of an organisation.

Five employees not only thought the company was distressed but indicated that it was so distressed that it would fail. However, as the breakdown of each individual employee's concerns displayed in Table 8.2 indicates, there are few differences in the observations between those who thought it would fail and those who did not.

Table 8.2: Individual Employees' Concerns

	Employee 1	*Employee 2*	*Employee 3*	*Employee 4*	*Employee 5*	*Employee 6*	*Employee 7*
Union Delegate	X	X	X	✓	X	X	X
Surprise On Receivership	✓	✓	✓	✓	✓	✓	✓
Events Observed							
Silverstream	✓	✓	✓	✓	✓		✓
Wastage and Inefficiency				✓			
Management Turnover		☑					
Autocratic Leadership							
Poor Plant Management		✓		✓			
Employee-Management Relations		✓			✓		
Heavy Infrastructure							✓
Planned Expansion							
Snow Storm							
1993 Employee Share Issue							
1993 Loss							
Stockpiled Inventory							
Leaked Document							
Procurement War	✓						
Union/Management Meeting				✓			
Employee/Management Meeting	✓	✓			✓	✓	✓
Stock Shortages, Short Days, Lower Wages	✓	✓		✓		✓	✓
Share Price		✓		✓	✓		
Increased Rumours	✓	✓		✓	✓		
Reduced Morale		✓		✓			
T. A. Pacific		✓					✓
Unusual Events						✓	
Investigative Accountant							
Creditors Reclaiming Property						✓	

KEY: ✓ = yes; X = No; ☑ Indicates a report of a potential indicator of distress which was not seen as a concern by the employee; ? Indicates where the employee did not comment on their reaction.

Table 8.2: Individual Employees' Concerns (cont)

	Employee 8	*Employee 9*	*Employee 10*	*Employee 11*	*Employee 12*	*Employee 13*	*Employee 14*
Union Delegate	X	X	X	X	✓	X	X
Surprise On Receivership	X	X	X	X	X	?	?
Events Observed							
Silverstream		✓	✓	✓	✓	✓	✓
Wastage and Inefficiency					✓		
Management Turnover					☑		
Autocratic Leadership					✓		
Poor Plant Management					✓		
Employee-Management Relations							
Heavy Infrastructure						✓	
Planned Expansion						✓	
Snow Storm					✓	✓	
1993 Employee Share Issue			✓				
1993 Loss							
Stockpiled Inventory		✓					
Leaked Document					✓		
Procurement War					✓	✓	
Union/Management Meeting					✓		
Employee/Management Meeting						✓	✓
Stock Shortages, Short Days, Lower Wages	✓	✓	✓	✓	✓		✓
Share Price	✓			✓	✓	✓	
Increased Rumours	✓	✓		✓	✓		✓
Reduced Morale		✓	✓			✓	
T. A. Pacific					✓	✓	
Unusual Events			✓				
Investigative Accountant					✓		
Creditors Reclaiming Property					✓		

As Table 8.2 indicates, the five employees who reported that they were unsurprised observed a higher average number of concerning events (6.2) than the seven who were surprised (5.3).[71] However, without employee 12 (Peter Binnie's 14 observations), the comparative averages become, 4.3 for those employees surprised upon receivership and 5.3 for the unsurprised employees. Furthermore, without Binnie's observation of symptoms, the two groups each observed a nearly identical average number of symptoms, 3.5 for those surprised, 3.4 for those unsurprised. Therefore, apart from Binnie who observed more problems and had access to more information, the differences between the groups cannot be accounted for by their observations alone. Instead, the employees' personalities, such as whether they were optimists or pessimists, or the extent to which they believed in the company, could be the determining factors. Alternatively, the respondents who reported that they thought the company was going to fail could have formed those opinions in hindsight.

5.4. Timely Observation

The initial observation, the construction of Silverstream, occurring five years prior to the company's failure, was one of the positive findings of this aspect of the research. The Silverstream development received criticism post-collapse but five of the employees were concerned at the time because of its size and cost.

This is just one of several examples of where employees, due to their position and access to informal information, identified events before the media and general public. Two other notable examples include the realisation that farmers were reluctant to send lambs to the plant six weeks prior to the media coverage of the farmers' concerns. The second was the meeting where management informed the employees that the company was struggling. The employees also revealed that Fortex was also purchasing lambs at prices well above that reported in the media.

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[71] The two interviewees who made no comment regarding their surprise or otherwise when Fortex was placed into receivership mentioned 9 and 4 factors each.

6. Limitations of Employees' Observations

6.1. Identification of Distress

The majority of the employees' observations occurred after the formal announcement in December 1993 that the company was struggling. Similarly, the union identified more concerns over the way the company was performing after the union management meeting. Furthermore, it was only the observations after the formal announcement that caused the employees any concern or were attributed to the overall position of the company. Without the formal announcement that the company was distressed, the employees' observations may have been markedly different. For example, they may not have recognised their later observations as symptoms, and at the extreme, they may not have ascertained Fortex's distress.

Prior to these meetings, other distress events, such as the construction of the Silverstream and Thompson's leadership style, were not recognised as factors which contribute to corporate distress. Moreover, another indicator of distress, Hearn's departure, was not mentioned as a concern whatsoever, and was only mentioned in passing in reference to another perceived problem. While this is not surprising, as the sampled group of employees was not expected to be familiar with the diverse nature and multitude of factors in prior research, it did limit the time-frame from which they realised the company was distressed to the last three and a half months of the company's existence. By this stage, the employees could do little but work harder to try to save the company, or sell their shares to reduce their losses. The employees had no means to act upon their observation that the company was distressed.

6.2. Linkage Between Self-interest and Observations

The employees were asked whether they identified any problems over how the company was operating and whether factors identified post-collapse as contributing to failure were seen as a problem. However, the employees more readily identified factors that affected them personally, either through reduced wages or a decreasing

share price. Examples include Silverstream, the employee/managment meeting and the rapid reduction in the share price in the post-Christmas 1993 period. This is a potential limitation since not all factors in distress have a direct impact on employees' wages (such as, management problems, overleveraging, poor accounting systems).

However, this may be an overly cynical analysis of the employees' perceptions, for Silverstream was also seen as a concern by several employees due to the expense involved and the time when it was constructed. Similarly, the decreasing share price was seen as an indicator of the overall company's performance. Furthermore, the employees could only comment on the events they had personally observed or had heard about from other employees. Usually personal observation was restricted to the areas in which the employees worked.

6.3. Different Observations

Not all the employees made the same observations. Only seven of the 22 factors identified were supported by more than three interviewees. Six were identified by a single interviewee. Notably three of those six observations were made by Union Secretary, Peter Binnie.

One potential explanation for these differences could be that the employees held different positions within the company. For example, unlike the employees who worked in the shipping office, the employees on the slaughterboard were not concerned about the inventory stockpile. Other potential reasons could be differences in personality, and the amount of communication with workmates. For instance, the union delegates, particularly Binnie, identified more problems or concerns than the employees who were not union delegates. The union admitted that they were privy to more information, and had considerably more contact with plant and head-office management than other employees.

Due to their positions, employees were not able to comment on the organisation's cash flow position or financial management. The differences in observations support Argenti's (1976a) assertion that employees are not in a position to observe the overall

position of the organisation. However, this problem may be reduced because Argenti (1976a) failed to consider the grapevine communication system as a means of spreading information around an organisation.[72]

6.4. The Third Party

Due to their position and ability to observe a wide range of events employees, are a valuable source of information for researchers who attempt to document the demise of a company after it has collapsed. However, the detection of distress during the company's life is far more difficult.

In this case, the employees did not realise the significance of their observations until late in the failure process. Even then, most believed that, while struggling, the company would survive. Argenti (1976a) noted that employees will not realise the significance of non-financial symptoms. This may have also been the case at Fortex if the employees were not officially informed of the company's distress, recalling that concerns and awareness were raised after that meeting.

To combat such a problem, Argenti (1976a) proposed the knowledgeable observer, an individual who understood the significance of the non-financial symptoms various parties observed. By talking to a variety of people and obtaining information from them, the knowledgeable observer could assess the overall distressed position of the organisation.

The knowledgeable observer had the potential to have a role in Fortex. By talking to employees over a sustained period of time, ranging from their first concerns in 1990 through to 1994, a knowledgeable observer may have detected Fortex's distressed position, and in particular, the early concerns of employees, concerns the employees did not associate with distress.

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[72] See Chapter 9 of this thesis for a further examination of this issue.

7. Conclusion

This case indicates that employees and union delegates have the ability to observe not only the non-financial symptoms of distress, but events which either indicate, or are in themselves, Argenti's (1976a) defects and mistakes. Moreover, employees are able to recognise symptoms and use them as a basis for assessing that a company is distressed. All but one of the interviewees were aware of the organisation's distressed position. However, with the exception of one person, Binnie, the interviewees were not aware of the significance of their earlier observations. Hence, while Argenti (1976a) has been found to be incorrect by positing that employees cannot determine distress, and that their observations are restricted to non-financial symptoms, his assertion that a knowledgeable observer may be required to accumulate and interpret employees' observations to detect distress may have proven beneficial in this case. Indeed, by talking to employees, the knowledgeable observer may have even been able to detect distress before Fortex displayed any visible symptoms.

Chapter 9

Case Study: The Grapevine

1. Introduction

The secondary objective of this research was to ascertain whether employees' observations in a distressed company are influenced by informal information. Chapter 3 outlined the characteristics of the grapevine and indicated that some of the information it carried corresponded with events reported in prior corporate distress research. The grapevine was also potentially interrelated with corporate distress in two other ways. Firstly, in a crisis, the grapevine's activity increases. Secondly, the grapevine affects an organisation's morale. Morale is a symptom of distress.

Chapter 8 provided details of the events which Fortex's employees found of concern. These events ranged from the defects which cause, to the symptoms which indicate, failure. This chapter relates the influence the grapevine had on the employees' observations of these events, and documents the characteristics of the Seafield plant's grapevine.

2. Characteristics of the Grapevine

As a consequence of the method of questioning, the employees were not required to comment on the speed, structure, or the accuracy of the grapevine. However, there were some indications in the interviewees' responses of how they perceived those features.

2.1. Speed

The speed of the grapevine was indicated by three interviewees who commented on the pace which a rumour could be transmitted around the plant and the local community. Firstly, rumours could be created and communicated between differing departments and around the plant quickly:

> *"Very, very easy to start a rumour in a place like Fortex. You only had to tell the tractor driver of such and such and by the time he'd been around to 4 or 5 departments you could spread a rumour mighty quick."*

Interdepartmental communication was also facilitated through contact between employees during the course of their jobs, and at lunch and tea breaks.

Secondly, one interviewee asserted that *"[w]ord soon gets around in a small place like Ashburton."* The employees received information from, and communicated information to, friends and relatives in the small local community. The community took a special interest in Seafield because the community depended on the plant for the employment of 800 employees who would spend their wages supporting local businesses. The plant also added to the local community through payments to farmers for their stock and other suppliers of goods and services. When the company was struggling in the Christmas 1993 period, the local community noticed the reduction in spending from Fortex's employees. Consequently, speculation in the local community increased.

2.2. Structure of the Grapevine

2.2.1. Participants

Through their responses, thirteen interviewees indicated that they participated in the grapevine by either acting as liaison individuals or dead-enders, and indicated that the grapevine was large, and sourced information from a variety of areas both internally and externally to the company. Unfortunately, no distinction could be made between individuals who fulfilled each position.

2.2.2. Isolates

Two employees (15 percent) within the sample were identified as isolates. Sutton and Porter (1968) found that one third of a company's employees function as isolates. They defined an isolate as an individual who had heard grapevine information less than half of the time. However, because this research was not experimental, it lacked the controlled conditions necessary to determine the proportion of information each employee received. Therefore, alternative criteria were developed based on interpersonal contact and whether or not they had heard rumours.

The first individual reported that he did not receive much information at all from his fellow workmates. The other considered himself well-informed, but worked in a secluded area of the plant. Both employees reported that they heard no rumours at any stage during the last few months. During this period each of the other employees reported talking amongst themselves about the company's performance, sharing their concerns over shortened days, and reduced wages. Furthermore, nine had identified that the level of rumour had increased compared to the normal level.

The apparent lack of rumours contributed to both isolates' surprise when Fortex's receivership was announced. One stated that:

> *"This is why it was such a shock to the workers themselves. It just absolutely floored everybody, you know that was the whole thing."*

While the reaction of surprise does not necessarily mean that the employees were isolates, it does provide some indication, because four of the five employees who expected the company to fail indicated that they had heard rumours. Furthermore, three of the other employees who indicated surprise stated that they held those opinions despite signs and rumours to the contrary.

The two isolates did not identify with their colleagues' concerns over the company's performance. One identified no concerns. The other reported only one, the construction of Silverstream. This is also consistent with being an isolate who, by lacking contact with other employees, would not have any knowledge of their concerns or any problems they had observed. However, an alternative, or complementary, reason could be that these two were not very observant or had poor memories. For example, the employee who had no concerns at any stage of the company's operations stated that *"I'm one of these fellow who can come home and forget about everything."*

2.3. Accuracy

While recognised as accurate in previous research (Walton, 1961; Davis, 1973), the grapevine was characterised as unreliable by several of the employees. They stated that it did not take much to start a rumour around the plant. In the extreme, such rumours were baseless with *"...people just saying anything they like and starting*

their own rumours to see how fast it would get around the plant." As a consequence, one respondent, a union delegate, reported that the grapevine was ineffective and 'did more harm than good.'

Even in retrospect this employee placed little value in the rumours which circulated the company when it failed, and indicated rumoured takeovers by PPCS, Alliance or an Asian company, which did not occur, as evidence of the grapevine's inaccuracy. However, for two reasons these rumours are significant. Firstly, they provide an indication that some employees were concerned about the company's performance to the extent that they considered it a takeover candidate. Davis (1972) reports that rumours indicate employees' concerns and apprehensions, and should be investigated. Secondly, while as a whole they were incorrect, the rumours may not have been entirely baseless. Like the findings of Davis (1953b) on the grapevine's accuracy level, these rumours could have been based on actual events, but contained a component of distortion.

There were two events on which such rumours could have been based. Firstly, one employee became aware, post-collapse, that Fortex was involved in negotiations with the Huttons Kiwi Group for financial assistance and a possible merger. Other employees could have been aware of these negotiations at the time they occurred.[73] Secondly, the 'inaccurate' rumours occurred in the last one to two weeks before Fortex failed. In this period, Graeme Thompson was also negotiating with the company's banks and, when that failed, a Malaysian company for financial assistance (Brett, 1994). These negotiations provide a basis for the rumour of an 'Asian' takeover. Both these examples correspond with Simmons' (1985, 1986) and Brownell's (1990) findings that grapevine distortion changes a message for the worse. In this instance, distortion changed the messages to a takeover rather than a merger or financial assistance, and to Fortex's rivals, Alliance and PPCS, and rather than the more neutral Huttons Kiwi Group.

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[73] Williams (1996) reports that Graeme Thompson was attempting to organise a merger between Fortex and Huttons Kiwi while Fortex was collapsing. Therefore, this employee's report of a potential merger is valid.

Caplow (1976) found that where there is an oversupply of information from formal sources, the reliance on informal information diminishes. The interviewee who reported that the grapevine was inaccurate was a union delegate. The union admitted that they had direct contact with head-office management and consequently knew more of the company's situation than the other employees. While the information that the union received directly from formal sources was sporadic, and therefore unlikely to have been an oversupply, it could have reduced the union's reliance on informal sources of information.

3. Formal Communication

Under normal conditions Fortex seemed to have an effective formal communication system. The employees were frequently informed of the company's successes through a company newsletter, and by management at lunch and 'smoko' (tea) breaks. Fortex was also the recipient of positive media coverage. In the past, information from management was perceived as correct and when reinforced by external parties relating the same positive image, the trust of information from the formal system was reported to be high. The employees' acceptance of formal information indicated their belief in Fortex and trust in its management.

However, with the exception of the meeting where extra productivity was requested, the employees regarded themselves as poorly informed through the formal communication channels when the company was distressed. Apart from the initial meeting in December 1993 where the company's financial problems were outlined, the employees reported only one other instance where information was provided from the formal system.[74]

Within the last fortnight before Fortex's failure a meeting was held where the employees were informed of 'temporary financing difficulties':

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[74] Post-collapse, the employees realised that the formal information they received was incorrect, understating the severity of the crisis Fortex faced. The inaccuracy of the formal information was undoubtedly one of the reasons that the interviewees criticised the formal system. However, it did not contribute to the employees' concerns at the time.

> *"Then there was a note put up - there would be a full meeting of all staff, such and such time. Ian Graham came around and said we've experienced a bit of a seasonal finance problem. We expect to have this ironed out in another couple of days. Just hang in there and you know, don't listen to the rumours and things will be fine.... He seemed so convinced of it himself."*

The company was reportedly short of cash and was negotiating with the banks to resolve the problem. At this meeting, management advised the employees to ignore any speculation and gossip concerning the company, implying that any informal information that they received was incorrect. This could arise from management's seemingly inherent distrust of the grapevine, which has been noted on several occasions (Zaremba, 1989; Nicoll, 1994; Wells and Spinks, 1994). Alternatively, plant management could have been trying to reassure the employees that the company was secure.

During distress, the employees posed questions to managers and foremen in an attempt to obtain information, but found that neither group knew any more information than themselves. Several of the employees reported that their superiors seemed to have little information regarding the company's performance, remarking in hindsight that the plant manager Ian Graham, and other salaried staff, were as surprised as the other employees when receivership was announced. One employee reported that:

> *"As it turned out I don't think he [Graham] knew any more than we did as far as it was. I think the directors kept it away from him too. Because at the time of the collapse he was with us that evening and said that he didn't know anything more about the running of the plant than we did. He didn't know they were in trouble."*

Their reports indicate a lack of formal communication from head-office to plant management, which resulted in a lack of formal information being passed to the employees. Union secretary Peter Binnie concurred, stating that head-office often contacted him directly and avoided plant management. Conversely, where the union required information, they would talk directly with head-office management.

The limited formal information and reassurances provided, especially those in the Christmas 1993 meeting, contributed to at least six interviewees' opinions that the company would not fail. However, the employees' concerns mainly stemmed not from a total absence of information from formal sources, but rather from an

insufficient volume of information to satiate the employees' demand. In such a situation, Walton (1961), Arnold (1983), Booher (1990) and Mishra (1990) assert that employees would rely on informal sources to provide the extra information that they required. Fortex was no exception.

3.1. Increased Grapevine Activity

During the distressed period grapevine activity significantly increased. The employees used the grapevine to supplement the meagre information provided from formal sources. A range of authorities have asserted that grapevine activity increases in times of distress or change (Davis, 1954; Esposito and Rosnow, 1983; Simmons, 1985; Garnett, 1992). Although these claims make intuitive sense, other than Davis's 1954 study, there has been a lack of evidence provided. However, in this case the employees reported that these claims had a legitimate basis.

Within the last three months of Fortex's life, nine of the interviewees indicated an increase in the number of rumours flowing around the company. The volume was such that one employee claimed that *"...there were so many rumours going around that we took them with a grain of salt actually."* The last week in particular was identified as a period of intense speculation. One employee noted that *"[i]t doesn't take much to start rumours around a freezing works though."* However, they continued, stating that some individuals took the rumours more seriously than others, which may have contributed to a lack of surprise or even expectancy that the company would fail.

The unusually high grapevine activity in the last few months was a result of the organisation's distressed position, where employees sought to obtain and share information about the company's position and therefore assess their own futures. The findings indicate that an especially active grapevine could be an non-financial indicator of organisational distress.

There are several inherent limitations, however, with increased rumour as a non-financial symptom of distress.

- Firstly, observation will be difficult unless the person is an organisational insider.

- Secondly, it would require the establishment of the 'normal' volume of rumour in that organisation. Therefore, determining the increase in volume accurate in terms would be difficult.

- Thirdly, an increase in the level of speculation about the company's performance could only constitute a non-financial indicator of distress when there is ineffective, or insufficient volume of, formal communication. Hence, an increased volume of rumour would only be a symptom in a company with poor formal communication. It must be noted though that other symptoms are not universally applicable to all companies (Argenti, 1976a). Therefore, this third point may not be a material limitation.

3.2. Lower Morale

The hypothesis that an increased level of rumour could be a symptom of distress gains more credibility in this case because the increased level of rumour coincided with a reduction in morale of the employees. Lower morale has been identified as a symptom exhibited by many failing companies (Argenti, 1976a; Scherrer, 1988, 1989b), and is the domain of the grapevine (Davis, 1953b; Arnold, 1983; Esposito and Rosnow, 1983; Mishra, 1990; Garnett, 1992; Simmons, 1986; Hull, 1994; Wells and Spinks, 1994). Therefore, any increase in the level of speculation about issues which affect employees' jobs could result in reduced morale.

Five interviewees claimed that morale decreased in the last three months, the same period in which rumour increased. According to one this was *"[m]ainly because nobody knew what was going on. I think there was a definite concern about their jobs."* Notably both increased rumour and lower morale occurred immediately after the December 1993 meeting where the employees were informed of the company's financial problems and were requested to make concessions. That event was identified as the cause of concern for 6 interviewees and was the first event recognised as signalling that the company was distressed. Subsequent observations, such as closing the second processing chain, the falling share price, T. A. Pacific's withdrawal, and farmers reluctance to send in stock, caused further speculation amongst the company employees.

These were just some of the events which the employees indicated that they discussed, or attempted to discuss, amongst themselves. Many of these events have been identified as factors in corporate distress.

4. Informal Grapevine Communication and Corporate Distress Factors

4.1. Informal Communication and Distress Factors Prior to December 1993

4.1.1. Employees

Three events were reported as subjects of the informal inter-employee communication associated with the grapevine. Those events were the construction of the Silverstream plant, stock being taken from Seafield to Silverstream, and the large number of salaried staff without apparent purpose. The discussions about salaried staff occurred at smoko breaks. Communication at these breaks was especially prevalent due to the sheer volume of employees congregated in the same place.

While these three events were the only ones which the employees were reported to have speculated about, there were numerous indications that, consistent with prior research, the employees discussed their work and the concerns they held amongst themselves (Davis, 1969; Esposito and Rosnow, 1983; Simmons, 1985; 1986; Mishra, 1990). For instance, the single interviewee who found Mullen's demeanour during the 1993 employee share offer unusual, attempted to explain her concerns and reasoning to other employees. The other employees disagreed with her opinion and did not believe her concerns were justified. The rebuttal was accepted with the observer stating *"...everyone's entitled to their opinion and that is all I had."* The rejection of a factor which, in hindsight only, may have indicated the organisation's distressed position is a secondary concern, as this example illustrates that employees may attempt to informally communicate their concern to others. This was not an isolated example.

The employees sampled reported knowledge of other employees' concerns about the company's operations. Such concerns included Silverstream's economic viability or lack thereof, the company's expansionary policies, and the 1993 financial loss. The loss was not identified as a concern by any of the interviewees but several indicated that their colleagues could not understand how the loss was incurred, and that the loss indicated to them that the company was struggling.

4.1.2. Union

The union was the recipient of one notable piece of informal information which other employees were not; the leaked documents in August 1993 which outlined proposed wage reductions. The proposed wage cut signalled a financially struggling organisation which was undertaking measures to improve profitability and performance. Consequently, the leaked document could be an observable symptom of the company's distress.

Binnie asserted that the content of the documents came to the union through informal means submitting that *"[i]t was sort of through a channel of communication through employees that we found out this information."* Plant management communicated information to a supervisor who discussed its implications with her husband in the evening. The following day the husband, who worked on the slaughterboard, passed on the information to the union. This informal communication was not reported by anyone else and seems restricted to the union. Hence, the union may potentially have had access to differing sources of informal information than other employees.

In this instance, the process does not correspond to typical grapevine communication which disseminates information to a wide range of individuals. Instead the information was informally communicated to specific individuals and not for general broadcast. This could be an example of Davis's (1953b) confidential grapevine information.

4.2. Informal Information and Distress Factors After December 1993

The employees indicated the December 1993 meeting with management as the time that most of their concerns were raised. The meeting preceded a period of increased grapevine activity.

4.2.1. Employees

After the meeting the employees overheard several pieces of information from the grapevine which were symptomatic of the company's distress.

4.2.1.1. The Venison Market and Processing Chain

During the Christmas 1993 holiday period the world venison market slumped. Prices fell dramatically. During that period a North Island venison marketing company collapsed. When the employees returned, post-Christmas, for the new season, the second venison shift was closed. According to one employee *"...that's when the rumours started about things aren't looking too good for the company. The last couple of months those sorts of rumours started coming out."* Hence, the collapsed venison market, and the closure of the second Seafield chain were the subject of grapevine communication.

4.2.1.2. Stock Shortage, Short Days and Price War

The stock shortage was observable from the employees' inside position, and was evidenced through shorter days and reduced kills. The shortened working days were a subject of speculation and bewilderment:

> *"We were wondering why we were on the three day system with four shifts when there wasn't enough stock to keep us going.... We were always talking about these things and how we were having short days, but there was never anything done about it."*

However, their assessment of the problem was not restricted to observation from their inside position and formal information. The employees assessed the severity of the situation through informal contacts external to the plant. Through information obtained from employees of the rival PPCS Fairton plant, Fortex's employees

became aware that the stock shortage was restricted only to Fortex. The other plants were operating at full capacity.

> *"Mainly a lot of rumours because.... Well rumours like whose got which chain going and when they're going to stop. Not their kill, because nobody was supposed to know that at all, but mainly how much work they've got per week. A three day week, a four day week, a full week or how many chains are not going. Then we got wind of this there was a price war on."*

Formal communication reported that the short days were due to intense competition between the processing companies and farmers holding stock back so that their lambs could get more cover (weight). However, the employees were also aware of an alternative reason for the shortages. Through informal contacts with farmers, they found that the shortages also stemmed from a reluctance to send lambs to Fortex. The farmers did not believe Fortex had the capability to pay for the stock.

This example illustrates the employees' ability to obtain information about an organisation not provided through formal communication channels. The employees used this information to provide an alternative explanation of an event which indicated the firm's distress. While gained from external sources, this information was disseminated through the internal grapevine to other employees within the organisation. Seven interviewees indicated an awareness of either the farmers' reluctance to send stock and/or that PPCS was not having stock shortages.

The external information was provided by friends and relatives who worked at the rival processing plant or who were farmers. Several of the employees who worked at the plant were also farmers themselves. Therefore, the employees gained information through first-hand knowledge. This information was also spread within the organisation via the grapevine.

4.2.1.3. Stockpile

Two employees indicated that information about the stockpiles at Ashcold and Seafield was passed to them from other employees of the company. They intimated that this information was also common knowledge to other employees. However, it was not identified as a concern because management reassured them that nothing was amiss.

4.2.1.4. Shares

One individual reported that they sold shares based on statement which a friend overheard a foreman make:

> *"Even when they went right down low, what were they about 11 cents or something, I bought something like 9000 shares at that stage. Me and a mate did the same. And then he heard, through the grapevine, overheard one of his foreman talking that things were getting pretty bad and he contacted me and we sold our shares. We come out with a very minor profit out of it, but we were still at that stage hoping the place would come right."*

Another noted that a prominent local businessman had told her that they had sold shares a week prior to receivership. The businessman, who had purchased the shares only a few days earlier, was adamant that the company was going to close on the Friday of the next week. The erratic behaviour of the share price was also the topic of speculation and the cause of employee concerns which were communicated via the grapevine.

4.2.1.5. T. A. Pacific

Initially, T. A. Pacific's investment caused employee uncertainty, possibly because it was seen as the start of a potential takeover. One employee stated that *"[i]t wasn't really until T. A. Pacific that it [the company's position] really got to be a main topic of conversation."* Uncertainty was replaced by optimism with the investment being seen as a sign of confidence in the company. However, the investment company's subsequent rapid disposal of the investment made only two months earlier was viewed as a signal of the organisation's distress.

Four of the interviewees reported that they, and most other employees, were aware of T. A. Pacific's reduction in shareholding, but none were unaware of where the information had come from. One credited such information to the grapevine stating that *"[s]omebody had told me so it must have been a rumour, you know."* If the information was carried by the grapevine, this is another example of employees being informed via the grapevine of events which signal an organisation's distress. However, the attribution of such information to rumour may not necessarily be

accurate since the grapevine is often incorrectly cited as the source of information when in fact it was obtained from another source (Walton, 1961).

4.2.1.6. ICI reclaiming chemicals

This event was observed directly by Binnie and was reported as a 'whisper' going around the company by another.

4.2.1.7. Receivership and Takeovers

In the last few weeks of Fortex's operations, rumours of takeovers by PPCS, Alliance or an Asian company were circulating the company. Within the final week, some employees had heard speculation that the company was to be placed into receivership. Whether this was based on knowledge gleaned from an authoritative source, or was a result of employees guessing at the outcome based on their own observations, is unclear.

4.2.1.8. Fraud

A single employee reported that during the last fortnight there were rumours of fraud. Firstly, that *"Graeme Thompson's been caught with his fingers in the till"* and secondly that *"[i] think before we even closed down this rumour passed around that certain loans had been misclassified or whatever, you know things were not done properly."* However, as no other employees commented on this, and the union was unaware of fraud or any murmurs concerning fraudulent activities, this claim is dubious. It could be a case where post-collapse information was mistaken as occurring at an earlier point.

4.2.2. Union

4.2.2.1. Lost Venison Contract

During the post-Christmas 1993 period, the union was informed of an event, which according to Robb (1986a) causes distress–the loss of an existing agency. An unnamed individual from head-office unofficially informed the union that the $17

million venison contract which Fortex was negotiating in 1992 (FGAR, 1992) was unsigned when the market collapsed. The German party withdrew its offer. Fortex was left holding a stockpile of venison which in a depressed market was overvalued and difficult to sell. The unsigned contract purportedly contributed to the $4 million 1993 annual loss.

The union did not pass on this information, which was otherwise restricted to a few head-office personnel, to the plant's employees, reasoning that *"if the company is in a bit of trouble this could only make it worse."*

4.2.2.2. Stiassney's Unfavourable Report

The appointment of the investigative accountant, Stiassney, was the subject of speculation. The concerns raised by his appointment were accentuated when the union found through informal managerial contact that Stiassney's assessment of the organisation was unfavourable. Again this information was kept within the union for fear of affecting the sharemarket and causing panic amongst the employees.

A summary of the distress factors which caused, or were the subject of, grapevine communication are presented in Table 9.1.

Table 9.1: Summary of Distress Events Carried on the Grapevine

	Pre December 1993	*Post December 1994*
Union	Leaked Document	Lost Venison Contract
		Stiassney's Unfavourable Report
Employees	Silverstream's Construction	Venison Market Collapse and Closed Venison Processing Chain
	Stock Transfer to Silverstream	Stock Shortage, Short Days and Lower Wages
	Overburdened with Salaried Staff	Stockpiled Inventory
		Shares
		T. A. Pacific
		Creditors Reclaim Property
		Rumours of Takeovers, Receivership and Fraud
Potential Grapevine Communication	Expansionary Policies	
	1993 Loss	
Attempted Interpersonal Communication	1993 Employee Share Issue	

Table 9.1 indicates that the grapevine carried an array of information detailing events symptomatic of corporate distress. The majority of the examples occurred in the last few months, a period in which speculation was reported to be higher than normal.

Notably there was no gossip or rumour regarding financial symptoms of distress. All the information revolved around making sense of the issues which directly affected the employees' jobs. The concerning messages were all non-financial in nature, indicating that the employees were not in a position to assess the financial position of the organisation, and that no financial information was passed to them via informal means. The findings support the proposition that the grapevine can carry information which indicates corporate distress. However, in this case while rumours were heard many individuals did not take them seriously, but rather classified them as rumour and therefore inaccurate.

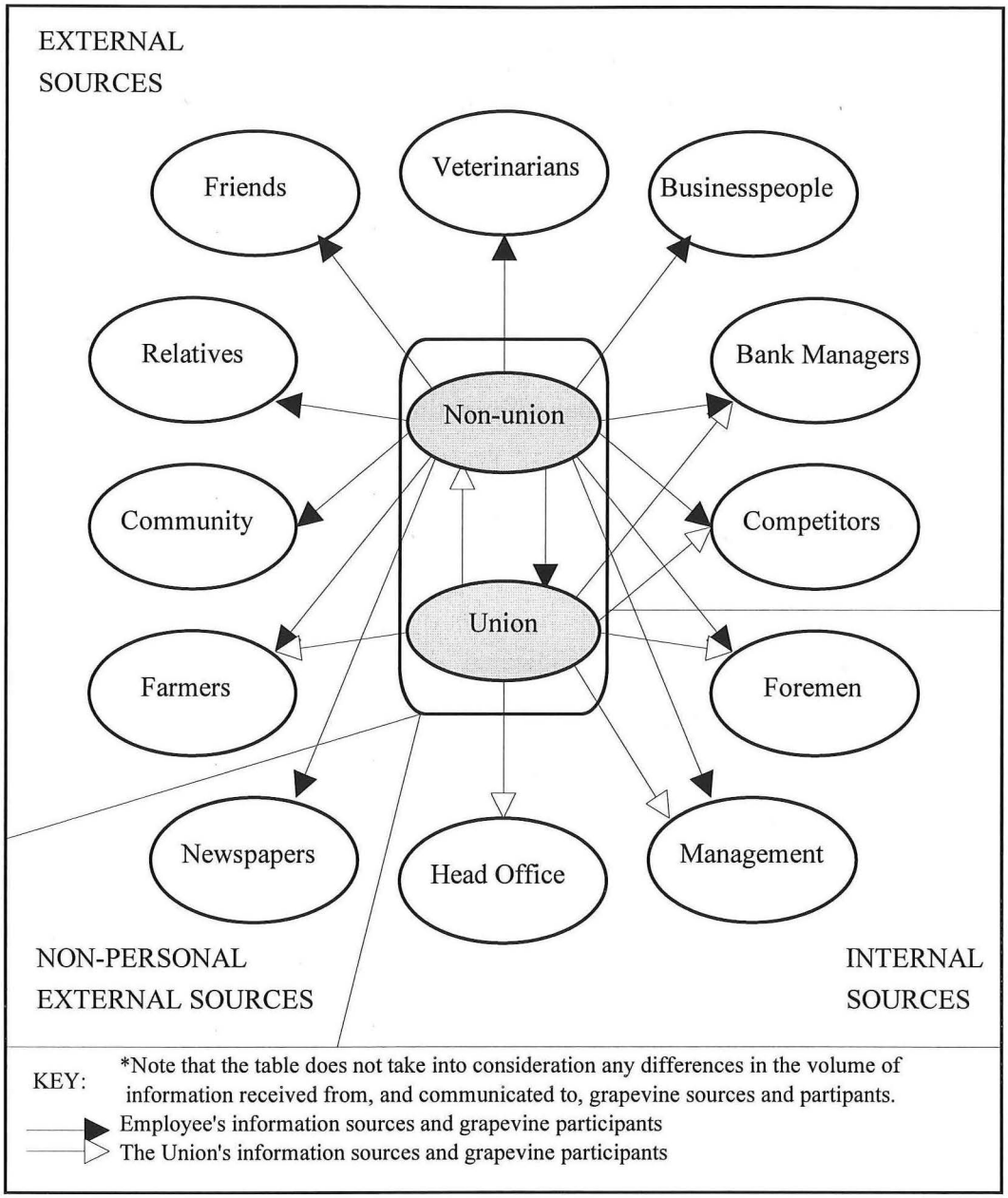
5. Internal and External Locale and Participants

Davis (1953) and Zaremba (1988) state that the structure of the grapevine is influenced by a number of factors. Two of those factors are different social circles and the physical layout of buildings and offices. Hence, contact from employee A to employee B would be more likely to occur where B is a close friend or work colleague of, or participated in the same hobbies and past-times as, A. This was found to be the case at the Seafield plant.

Friendship meant even confidential information was passed from the union to an individual employee who was a close friend of the delegate. Similarly, through contact with external parties such as relatives and friends, information about farmers and competitors were obtained.

The employees and union alike indicated a diverse range of sources where the informal information, which was eventually disseminated by the grapevine, originated. Undoubtedly, formal communication was the origin of some of this information. However, it remained largely uncredited in this respect. However, the evidence indicates that the employees undeniably used informal information, particularly from sources external to the organisation, to determine that the company was distressed. Figure 9.1 displays the variety of internal and external grapevine sources and participants which the employees and unions observed:

Figure 9.1: Grapevine Sources and Participants



5.1. Employees' Internal Informal Information Sources

5.1.1. Colleagues

Consistent with other research, Fortex's employees conversed with their colleagues in order to allay concerns and obtain information. This network of communication extended across differing sites in the plant with the employees in different departments indicating a common knowledge of events which affected themselves

and the organisation. For instance, one employee when questioned about rumours reported:

> *"They just come from around here I suppose. Just a bit of discussion here and there. The group I sat in, you know, we always talked about it. There was a group of us from different departments. Well like a bunch of old women the gossip goes on. All like to know what's going on and these bits come up."*

Simmons (1985) reported that liaison individuals were most likely to be staff members as they can cross departmental boundaries and spread information. The boundary spanning characteristic of the liaison individuals was apparent in references made to communication patterns of Fortex's grapevine. Tractor drivers were referred to in a liaison role: *"[y]ou only had to tell the tractor driver of such and such and by the time he'd been around to four or five departments you could spread a rumour mighty quick."* However, it was at luncheon and tea or 'smoko' breaks that the employees had the most opportunity to communicate with employees from various departments. At these intervals any current issues or rumours would be discussed. According to one interviewee:

> *"[i]f anybody had had an inkling of anything substantial at all, hell the smoko room's where it flies. You get 60 odd people in there at lunch-time and the rumours flow pretty quick."*

One example of inter-floor communication was the employees' knowledge of the stockpiled meat. The information was reported to originate from employees who worked in the chiller. The individual who related this information worked in the venison floor. Within the last few days, rumours of receivership circulated the organisation. When commenting on these rumours the interviewees indicated that they received information from individuals in their own and different floors. For instance, another employee who worked in the venison chain overheard this rumour from slaughterboard workers.

5.1.2. Foremen and Managerial Staff

The internal informal sources of information were not restricted to discussion with their fellow work-mates. Several interviewees indicated informal communication with managerial staff and foremen as a source of information when the company was distressed.

Informal contact with management was limited. The only employee who had direct contact with management stated that: *"I had a few mates in management. I sort of was privy to a lot of information that the ordinary workers didn't have."* However, this information did not prevent the employee and the manager from being surprised when the company failed. Instead the information gained from management was limited because the information plant management received themselves was limited.

While the foremen who were ex-union delegates were viewed with contempt, a few others were included in the grapevine, with four interviewees reporting discussing their concerns and other job related issues with them, and receiving confidential information. The first reported *"...foremen through management. They'd hear something through the management that wasn't told to us.... We got along good with our particular foreman in our room."*

The second employee elucidated this point:

> *"There was always somebody who knew something or picked it up along the line from their department or their foreman that, you know, just sort of enlightened us that that wasn't quite the truth type of thing. Some of information that we got on that sort of thing which helped us form opinions was... I was very friendly with one of the foreman in our department and they went to a lot of these meetings, and they let a bit of stuff slip here and there."*

Unfortunately this respondent could not recall any examples of information being received from this friendly foreman.

Of the two others, one reported that their foreman *"...was very good and open to talk about it [Fortex's position]."* The other discussed a feeling that the company was in more trouble than had been revealed with his foreman:

> *I think it was something that I read in the paper about they'd lost markets overseas for some reason, they hadn't been marketing the product properly, and I just said to this foreman this day that there's something not right here. They're not selling the meat. They're in trouble. And he says "if what you say is right then we are in big trouble."*

Overall however, these examples were isolated. Little information was informally passed to the employees from their superiors. Any information was passed due to friendship. Furthermore, as the preceding employee's observation indicates, the foremen, and with hindsight plant managers, had little more information than the

employees themselves. Hence, any information received from managers and foremen was limited as neither managers nor foremen were privy to information which revealed the 'true' nature of Fortex's distressed position.

5.1.3. Union

Other than the daily, even hourly, presentation of share prices to the employees, informing the employees of their efficiency levels, and that the company was in trouble, the union provided little information to the employees. Yet two interviewees believed they gained a considerable volume of information from the union. Only one of these assertions was justified. A single employee, who was a close personal friend of one of the delegates, was the recipient of more information from the union than any of the other individuals. This employee was considerably more informed of events which preceded the company's collapse, reporting the joint-second highest number of concerns (9).

The other interviewees contended that little information was forthcoming. Despite that, and a knowledge and acceptance that the union were not telling them everything, the interviewees acknowledged that they maintained a good partnership with the union:

> *"They knew more than we did of course, and they told us the company was in trouble. They didn't realise, I don't think, that it was in as serious trouble as it was either. But Peter and his delegates were telling us that this company is in trouble and we were going to have to help them if we were going to keep our jobs."*

The fact that this stance was not questioned indicates a trust in their elected representatives. The union themselves admitted that they held information which was not passed on to the employees and others due to the potential effect it would have on morale and the stockmarket. While they did not know the actual extent of the company's financial difficulties, they realised that spreading information may harm the company, precipitating its early failure.

While it seems that grapevine information was predominantly received from colleague or floor employees, this should have been expected. In the typical course of a day's work an employee will have more contact with their peers than managers

or a single supervisor. Hence, there will be more potential for communication between employees. However, by providing information which was often subsequently communicated amongst the employees, the managers, foremen and the union were effectively liaison individuals. The participation of these individuals could have partially contributed to the employees' identification of factors which contributed to Fortex's distress.

5.2. Employees' External Informal Information Sources

While internal participants in Fortex's grapevine were not numerous, there was a vast number of external participants in Fortex's, making the grapevine active beyond the organisational boundary.

5.2.1. Local Community

When the company was struggling in the Christmas 1993 period, the local community, especially retailers, noticed the reduction in spending from employees. Consequently, speculation in the local community increased.

Identities in the local community were referred to as 'sources of information' about the company. These individuals proffered their own opinions to two of the employees interviewed. The first, a veterinarian, purportedly stated that Fortex had made limited profits in good times and questioned their ability to continue in a period of adversity. This statement was made in conversation approximately three months prior to failure. The second was a prominent local businessman who sold his shares a week prior to the failure. At that stage he was adamant that the company was going to be placed into receivership. A week later it was.

Another external source was information from a bank manager which was received second-hand by an employee from a friend who had participated in the conversation.[75] The example of friendship being a factor in informal communication is not an isolated one. Employees also received information from, and

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[75] This example is detailed in the section regarding friends and relatives which follows, p 215.

communicated information to, friends and relatives in the local community. Such communication provides a rationale for the statement that *"[w]ord soon gets around in a small place like Ashburton."* Rumours in the local community were given by one individual as part of the reason that they believed the company was going to fail.

5.2.2. Friends and Relatives

The importance of information from relatives and friends cannot be underestimated. Through family contacts the employees found a variety of information. For instance, in the largely rural Ashburton community, most people either were themselves, or knew persons who were, farmers. Either directly or through contact with friends and family knew farmers, details such as slow payments or in extreme cases payments not being made at all, reached the employees:

> *"A lot of farmers, we are all related to farmers or have got farms of our own, stock agents. It was a bit of feeling around, you know. Well Joe Bloggs down the road has never been paid for his lambs. Little things like that. We thought there must be something going on."*

Similarly, information that the farmers were withholding stock because of such issues were also received by the employees via contact with relatives and friends. These events in turn became widely known throughout the workforce.

Friends of two interviewees were identified as important sources of information in two respects:

- During the last three months, a period in which rumours increased, one individual had friends ringing him saying that *"...they'd heard through such and such a person that Fortex was going to be put into receivership and this was a few days before it actually did and that came through a friend whose bank manager had told him that."* The bank manager believed that the company was to be placed into receivership a week later. Based on this opinion, both the employee and friend sold their investment in Fortex.[76]

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[76] This employee recognised his actions as of dubious legality stating, *"[t]hat's almost classed as insider trading."*

- The employees' concern over working short days was accentuated when, through friendship with employees at the rival Fairton plant, they discovered that they were working a full week without suffering shortages.

Hence, through informal contact with relations and friends, a few employees within the company received information from a bank manager, farmers, and rival employees. Despite such informal contact not necessarily being part of the grapevine, other employees, without the same external contacts, reported that they were aware of both the farmers' concerns and Fairton's operations.

5.2.3. Farmers

Six of the interviewees mentioned knowledge of farmers' reluctance to send stock. Two had, either through friendship with the farmers themselves or through friends who knew farmers, found that they were not sending in stock through fear of not receiving payment. The remaining four indicated that the knew of such information through rumours which were travelling around the plant:

> *"Some of the people that actually worked out there at the time were on farms or had dealing with farmers. They were letting me know then that they weren't going to send the stock in. They didn't feel that Fortex were going to pay them."*

One employee postulated that the widespread reluctance to send in lambs was due to a rumour which was circulating around the local farming community:

> *"But I think there may have been a bit of a whisper out in the community before it became official because it didn't take long for most farmers to know that they shouldn't be sending their stock there."*

5.2.4. Inter-company Information and the Industry Grapevine

The bonds of friendship and kinship were evident in the information reportedly received from rival companies. More individuals asserted that they knew of competitors' production levels than the two who had direct contact with PPCS's employees. Any knowledge of competitors' production indicates some form of information transfer between the meat processing companies. However, a number of employees remarked that they knew what their rival companies were processing

without indicating informal contact with friends and relatives within the opposition's plant. Post-collapse there were also rumours concerning PPCS's role in Fortex's downfall.

These examples indicate two things:

- Firstly, that informal communication occurred between employees who had access to information from other companies and those who did not. When explaining how information from other companies was obtained, other employees within the company were also given as a source, with one employee stating that:

  > *"One of the guys came from Oamaru some from Islington, others from other places. So that's how we got to know a lot of people and got to know a lot about competition through that."*

- Secondly, there was a form of industry grapevine which the employees continued to have access to after their own company had collapsed.

The second point is further supported with evidence that inter-company communication was a two way process. While Fortex's employees gained information from their rivals, their competitors also seemed to know of Fortex's distressed position. Rumours of Fortex's strife were reportedly spread by PPCS employees. Where PPCS's employees gained the information to ascertain that Fortex was in trouble in unclear. One respondent submitted that they had *"...heard different things from the union and employees from other companies such as Fairton. The Fairton employees said they had heard Fortex was in trouble, but it was more hearsay than anything else."* Without any reason for their opinions, the Fortex employees attributed the statements to inter-company rivalry.

While there is evidence of inter-company information similar to that proposed by MacDonald (1992a; 1992b) and individuals acting in the role of a gatekeeper, there are some notable differences. Within Fortex, this gatekeeper role was undertaken on an unofficial basis. That is, the employees who received the information were not officially appointed as gatekeepers, but filled the role through their personal relationship with the other company's employees. However, they did transmit the

information to others inside their own organisation, thereby fulfilling the gatekeeper's role.

5.2.5. Non-personal Information Sources

As an aside, it is interesting to note that one interviewee's concerns were exacerbated by a newspaper article. This finding provides support to Hull's (1994) assertion that employees could glean external grapevine information from newspapers, magazines and television.

5.3. Union Delegates' Information Sources

When directly asked where the union obtained most of its information, Binnie responded that:

> *I guess as a generality I guess people or human beings from all walks trusted the union more than they trusted the company. So that was salaried staff the lot. And we didn't... we weren't doing anything special. We hoped we were being effective. And it [information] just seemed to come our way.*

Most information was gained from internal sources, both formal and informal.

The union was the recipient and instigator of formal communication. Often communicating directly to head-office, circumventing the formal channels. They acknowledged their privileged position, admitting that they were the recipients of substantially more formal communication than any other group on the plant, including plant management.

One example was the joint board of controllers meeting in Oamaru during September 1993 when Thompson and McIntosh outlined the company's financial woes. Unfortunately no other examples of formal communication were provided. However, both delegates were adamant that such communication had occurred, reporting that head-office management would approach the union for assistance because the employees would more readily accept requests for extra production from the union rather than from management.

Despite being a reservoir of information, the union declined to disseminate their knowledge to other employees. In this respect they were acting as dead-enders, individuals who do not send but only receive information from the grapevine. This approach was undertaken to limit the effect on the company's position, both with regard to farmers and suppliers, and to the sharemarket. By spreading such information they were worried that those groups would act adversely, which would only worsen the company's position.

There are notable differences, however, between the union's action and that of a typical dead-ender, such as the conscious choice not to communicate selected information to the employees. The selectivity shown conforms to Davis's (1953a) identification of a form of confidential grapevine information whereby information may not be passed to those not meant to receive it. In this instance, the employees and particularly the general public and the stock market were parties to which this information was not to be disseminated.

Reliance on formal information would presumably indicate a decreased reliance on informal information sources. Nevertheless, the union was the recipient of internal and external informal information. Generally, Binnie reported that information was gained from 'keeping their ear to the ground', commenting that it was:

> *"...surprising at times you would get information sometimes when you least expected it. People would confide in you. Sometimes people that you didn't expect normally would."*

5.3.1. Internal Information

The predominant source of information was the employees who communicated their fears, concerns, and rumours to the union. They also reported having informal contact with supervisors and some salaried plant staff. Upon hearing rumours or concerns, the union would investigate to discover the cause, and whether there was any underlying truth. The information from employees offers a potential explanation as to how the union knew of the employees' concerns over such events as the falling share price, T. A. Pacific, and the stock shortage and price war, all of which have been identified as symptoms of Fortex's decline.

Table 9.1[77] indicated that the union was the recipient of three pieces of informal information which were not reported by any other employees. All of this information originated at a managerial level. Only one, the leaked document, was delivered to the union by a non-managerial employee; the other two were obtained informally from head-office. Binnie indicated that this was not uncommon, stating that *"[w]e had various spots where we could pose a question. Its rather remarkable what you can pick up without trying too hard at times."*

The union also acted as a source but refrained from providing all the information they knew for fear of worsening the company's position with respect to farmers, suppliers, and the sharemarket. However, as indicated earlier, the unions policy of restricting the information they provided was circumvented when, as a result of friendship, one delegate communicated information to an employee. Whether this information was any more detailed than the information the union passed to other employees is impossible to ascertain. Nevertheless, the employee believed that through the informal contact, he was in a privileged position and had more knowledge than the other employees. This employee seemed more knowledgeable than his colleagues.

5.3.2. External Information

Regarding external information, Binnie reported that the union never sourced a lot. However, he did provide some examples:

> *"You would sometimes get onto something where farmers might have picked up something from the board of directors and then it would start doing the rounds and you could start backtracking....You could start and ask some subtle questions, or some blind questions, or an opposite question and you might find out what you wanted."*

'Doing the rounds' was undefined but common usage would indicate that the information was transmitted amongst farmers and the community as a rumour, or in a grapevine communication format.

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[77] Table 9.1 was presented on p 208 of this thesis.

Again farmers were mentioned as a valuable source. Binnie himself was a farmer, which would explain where such information came from. The interesting point is that farmers could potentially have contact with the company directors, a statement which would seem anomalous for most other companies where the directors would be most unlikely to have direct contact with any suppliers. However, several of the directors had farms themselves, and in the tight local community, employees indicated that it was not uncommon to have informal contact with the senior officers outside the company.

Other sources mentioned included information from rival companies and banks both within Ashburton and in Christchurch. Close to the failure, Binnie reported a conversation with the Christchurch rural branch head of one of New Zealand's leading banks. The conversation, instigated by the banker who was a friend of Binnie's, preceded Fortex's receivership and concerned potential retaliatory action from employees against the bank. Concerned that the employees would withdraw funds and undertake other action, the bank manager sought to protect his own company. In doing so he showed Binnie that the company was close to failure.

5.4. Summary

Through a variety of means ranging from friends and relatives, to industry rumours and information from individuals in the local community, Fortex's employees, both union and non-union, gained a considerable volume and diversity of informal information. This finding is consistent with previous research which reported grapevine participants can be external to the company (Davis, 1969). The variety of sources provided information which contributed to the employees' observations of problems and their detection of distress.

6. Implications

The case suggests that the grapevine may carry information which indicates symptoms of a failing company. Fortex's employees identified grapevine information and rumour as contributing to their opinion that the company was

distressed. Therefore, it is one of the information sources which McBarnet et al (1993) reported that employees use to ascertain problems.[78]

If employees can use grapevine information to determine distress, then an external party may also do the same. This external party could be Argenti's (1976a) knowledgeable observer, an external auditor, or even an external grapevine participant. However, the extent to which the knowledgeable observer and external auditor could use grapevine information in this respect would depend on the employees' willingness to communicate information.

Moreover, increased grapevine activity in itself may be symptomatic of distress. The grapevine communicates rumour. At the same time that rumour increased, morale decreased. Morale is the domain of the grapevine and is a symptom of distress. Therefore, increased grapevine activity may be a further symptom of distress.

7. Limitations

The findings have several potentially limiting factors. Firstly, not all of the interviewees' reports of rumour may be attributable to the grapevine. Employees often believe that they receive more information from the grapevine than they actually do (Walton, 1961).

Secondly, not all of the informal information is necessarily grapevine information. Some of information gained from friendship with a union member, businessman or relatives, may remain confidential. For instance, a dead-ender may hear information from such a source but not transmit it to other employees. However, in many instances information from personal relationships with farmers, friends and other employees within the plant was then conveyed via the grapevine.

Thirdly, grapevine information depends on initial observation. For example, the rumours of a large stockpile of inventory at Ashcold originated with employees at the

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[78] McBarnet et al (1993) continued by stating that the observation of these problems often prompted a call for financial information which allowed the detection of creative accounting. However, this did not occur in the Fortex case.

storage facility. The grapevine may not cover all the employees within the company and therefore some information, such as financial information, may not be transmitted. Nevertheless, interdepartmental, and inter-organisational communication can make employees aware of problems that they have not directly observed.

Fourthly, not all people have access to the grapevine. Employees do not necessarily always receive grapevine information. Therefore, few employees will be aware of all of the concerns of the other employees.

8. Conclusion

Fortex's grapevine was large, reaching 13 of the 15 employees interviewed and a variety of parties outside of the organisation. Its activity increased after the employees were informed that the company was financially struggling. During this period, the employees reported that via the grapevine they discussed many of the concerns which were identified in Chapter 8 as defects, mistakes and symptoms of distress. This information contributed to their belief that the company was distressed. Therefore, third parties and managers should take notice of grapevine information as it carries information which can indicate problems which cause corporate distress.

Chapter 10

Case Study: The IAIS

1. Introduction

Chapter 4 outlined the characteristics of IAISs found the in previous research. The review provided background information to ascertain whether the IAIS was an informal source from which employees gained information, and whether that information contributed to their opinion that Fortex was, or was not, distressed. During the review three other potential interrelationships between an IAIS and distress were also proposed:

- Firstly, that an IAIS in itself indicates distress.
- Secondly, that employees or an external party could use the information from the IAIS to verify the accuracy of formal accounting information. A comparison could reveal a defective accounting system or fraud and creative accounting.
- Thirdly, that an IAIS could be constructed in response to weaknesses within the organisation.

This chapter documents Seafield's IAIS and analyses the potential interrelationships between the system, employees' observations and opinions, and corporate distress.

2. Fortex's IAIS

The IAIS operated in three areas, the lamb cutting floor, venison cutting floor and the slaughterboard, and was maintained by two union delegates and one management representative.

2.1. Why was the IAIS Introduced?

In 1991 Fortex achieved a $2.89m profit (FGAR, 1991).[79] Although reported as 'satisfactory' in the annual report, Fortex's management were privately disappointed

[79] Fortex's financial year ended on August 31.

with the company's financial performance. Therefore, in September, in an attempt to increase profitability, they proposed a 10 percent wage reduction. Unsurprisingly, the union did not believe that such a measure was necessary. Seafield Union Secretary Peter Binnie, recognising that the further processing was Fortex's value-added activity, responded that if management sought improved profits, it should first target inefficiencies and wastage in the production process.

Through his position, Binnie assessed that approximately one third of the productive time in the lamb and venison further processing rooms was being wasted. This equated to $2 million in lost earnings potential each year, a figure which was reportedly verified by Fortex's management. Binnie detailed these inefficiencies and time wastage in a letter which was presented to plant and head office management. A meeting was convened with managing director Graeme Thompson present.

To Binnie, Thompson seemed uninterested with hearing these problems. However, some notice must have been taken because the threatened wage reductions were not enforced. Instead the union and employees undertook measures to increase the company's productivity and efficiency. The IAIS was constructed to provide a daily efficiency check which would identify where production did not meet budgeted levels.

2.1.1. Dual Purposes

According to Binnie, *"[t]he sole purpose of the thing [the IAIS] was to get productivity right up to where we wanted it to be, and maintain it there as well."* However, there must be doubt over this claim. The production problems were only identified after a wage reduction was threatened. The wage reductions were not imposed because the union promised to increase production levels. Hence, the increased production and IAIS were effectively a trade-off which protected the employees' wages.

The introduction of the IAIS also had a secondary monetary benefit. Fortex's employees were paid on an standard hourly rate plus an incentive. If production was not maximised they would not receive their highest possible wage:

> *"...efficiency meant so much. It meant all the potential productivity for the company and it meant all the potential wages for the people....So if we weren't getting our full incentive we needed to know why we were not getting it, and the reasons we wouldn't be getting it was because the room wasn't performing at the levels it should have been."*

The management of production through the IAIS increased productivity and therefore had the side-effect of increasing the wage every employee received. Hence, the IAIS benefited the company through increased production, and the employees by not reducing their standard hourly rate and assuring that they received their maximum incentive.

2.2. The Data Maintained in the System

The informal accounting information was entered on computer generated spreadsheets. Two typical spreadsheets from Seafield's IAIS are presented in Exhibits 10.1 and 10.2.[80]

At the start of each day the production requirements were entered into the spreadsheet. Each different type of cut required seven pieces of data. These areas were:

- Number of carcases to cut or tally;
- Number of carcases paid for;
- Degree of difficulty of the cut-as some cuts were more difficult than others, they were assigned a difficulty level based on the standard time it should take to perform them;
- Manning on the main line;
- Manning in the nichiro boning room;
- Tally speed-a belt ran through the room conveying the meat past the employees. The speed of the belt differed according to the difficulty of the cuts; and

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[80] Exhibits 10.1 and 10.2 are set out on pages 231 and 232.

- Tally time-the budgeted time required to process a specific cut. Measured in minutes a 'tally time' is calculated by dividing the number of carcases by the tally speed.

To calculate the daily efficiency measure, an employee recorded the exact time cut changes took place in a notebook. At the end of each day these times were transposed into the spreadsheet in the 'start time' and 'finish time' rows. The cut change times allowed the calculation of the actual production time worked per cut. The differential between the actual production time worked and the budgeted or 'tally' time indicated the time gained or lost.[81] For example, in Exhibit 10.1, of the ten tallies processed during the day, six were performed slower than was budgeted, three were faster, and in one case (the last tally) the production time worked equalled the tally time. Overall 31 minutes production were lost during the day. Notably, only the three negative variances over two minutes were subject to any scrutiny. The union ignored small negative and any positive variances which resulted from performance which was near to, or exceeded, expectations.

The efficiency of the cutting rooms was also assessed by determining the amount of time lost making cut changes, performing rework and miscellaneous time losses. Each of the three variables were contained within the spreadsheet, together with an area for written comments on the days performance, including any problems which had occurred.

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[81] As the system developed the net minutes gained or lost were divided by the total minutes in a day to display daily efficiency as a percentage operating capacity.

DATE 17-3-93

SHIFT TIME AVAILABLE

CARCASE GRADE	FXP2	FXP3	HPY	HPI	LPIH	MO	FXP2 B	HPI B	LPIH B	LPH
C/S TO CUT	1156	308	198	148	115	188	295	124	182	230
RAIL IN COUNT	1473		369	148	117		330	163	338	110
DIFFERENCE		11	1		2		35	39	156	
PAID AMOUNT	588	828	415	147	120	182	323	193	334	110
D.OF DIFFICULTY	13	12	12	10	10	14	10	12	8	7
MANNING/MAIN LINE	52	52	52	52	→		52	→		52
MANNING NICHIRO										
ACTUAL ROOM SPEED	6·1	6·3	6·3	7·0	7·0	5·8	7·0	6·3	7·6	7·6
TALLY SPEED	6·1	6·3	6·3	7·0	7·0	6·8	7·0	6·3	7·6	7·6
TALLY TIME(PD C/S / TAL.SPEED)	97	131	66	21	17	32	46	30	44	14
PRODUCTION TIME WORKED	99	146	58	35	16	33	55	28	45	14
DIFFERENTIAL	2	15	8	14	1	1	9	2	1	
LOST TIME/CUT CHANGE		4			3		3			
MISC LOST TIME										
REWORK										
START TIME	600	743	937	1030	1108	1124	1200	150	218	441
FINISH TIME	739	800	1010	1105	1124	1157	1210	218	303	455
		820	413				105			
		937	440				150			

323
415

Lost time: - slowed on speed 230 - (2) vac machines out at once!!
stopped to clear - with only (1) operational tally
speed 4·0 p/m.

Differentials: - HPI (14) FXP2 - leg tally!
slowed room
FXP2 (9) - unsure of actual stop time.

* Multiple problems - shrink x 8600 blocked then by coincidence
Room electrical problems - all belts out.
12·10 → 12·40 am

COMMENTS	PROCESS CONTROL SCORE 63
NICHIRO MANNING	OUT OF CONTROLS 0
NICHIRO SETS CUT	WASHDOWN - BONE 100
NICHIRO EFFICIENCY	WASHDOWN - WRAP 100
DAILY ROOM BONUS	MANNING
DAILY ROOM EFFICIENCY	LOST TIME PAID

DON'T FORGET NICHIRO SHEET AND FRENCH RACK RECOVERY SHEET

Electrical problems contributed to vacuum - (30 mins)
loss of / many / leakers.
* 511 c/cs not suitable for UK chilled - DID 9
= any comments??

Exhibit 10.2: IAIS Spreadsheet 20/4/1993

DATE 17-3-93 — SHIFT TIME AVAILABLE

CARCASE GRADE

	FXP2	FXP2	HPI		HPI	LPI H	MO	FXP2 B	HPI B	LPI B		LPI
C/S TO CUT	1156	308	198		148	115	188	295	124	182		230
RAIL IN COUNT	1475		369		148	117		330	163	338		110
DIFFERENCE		11	1			2		35	39	156		
PAID AMOUNT	588	528	415		147	120	182	323	193	334		110
D.OF DIFFICULTY	13	12	12		10	10	14	10	12	8		7
MANNING/MAIN LINE	52	52	52		52	→		52	→			52
MANNING NICHIRO												
ACTUAL ROOM SPEED	6·1	6·3	6·3		7·0	7·0	5·8	7·0	6·3	7·6		7·6
TALLY SPEED	6·1	6·3	6·3		7·0	7·0	6·8	7·0	6·3	7·6		7·6
TALLY TIME(PD C/S / TAL.SPEED)	97	131	66		21	17	32	46	30	44		14
PRODUCTION TIME WORKED	99	146	58		35	16	33	55	28	45		14
DIFFERENTIAL	2	15	8		14	1	1	9	2	1		
LOST TIME/CUT CHANGE		4				3		3				
MISC LOST TIME	P											
REWORK												
START TIME	600	743	937		1030	1108	1124	1200	150	218		441
FINISH TIME	739	800	1010		1105	1124	1157	1210	218	303		455
		520	415					105				
		937	440					159				

323
415

Lost time: — slowed on speed 230 — (2) vac machines out at once!!
stopped to clear — with only (1) operational tally
speed 11·0 p/m.

Differentials: — HPI (14) — FXP2 leg tally!
slowed room
FXP2 (9) — unsure of actual stop time.

* Multiple problems — shrink x 8600 blocked then by coincidence Room electrical problems — all belts out. 12·10 → 12·40am

COMMENTS	PROCESS CONTROL SCORE 63
NICHIRO MANNING	OUT OF CONTROLS 0
NICHIRO SETS CUT	WASHDOWN - BONE 100
NICHIRO EFFICIENCY	WASHDOWN - WRAP 100
DAILY ROOM BONUS	MANNING
DAILY ROOM EFFICIENCY	LOST TIME PAID

DON'T FORGET NICHIRO SHEET AND FRENCH RACK RECOVERY SHEET

Electrical problems contributed to vacuum — (30 mins) loss of / many / leakers.

* 511 c/cs not suitable for UK chilled - DID 9 = any comments??

2.2.1. Daily Operations

At the end of each day the performance of the slaughterboard and cutting floors was examined to see if it fell within the expected parameters:

> *"If it wasn't within the parameters that we expected we had what we called a focus meeting every day and we'd go over that and we'd say well what happened here and we would investigate it."*

During the enquiry the supervisor in charge of the cutting room would be questioned as to why the variance arose. If a reasonable explanation was not supplied, the supervisor would be reprimanded and told to perform. Similarly, if the problem originated with the chain employees they would also be reprimanded. Thus, personnel were managed and informally evaluated on the performance reported by the IAIS. This evaluation was assisted with comparisons of the informal records to the formal records.

2.2.2. Comparison to the Formal System

Production information was kept by the organisation's management accounting system. Periodically the formal and informal records were compared. The comparison showed that the records were approximately the same. However, like the findings of Clancy and Collins (1979), Binnie believed that the informal system was slightly more accurate. Supervisors provided the information in the formal system. Experience showed that they often made errors which they tried to hide by 'juggling' times and giving incorrect times for cut changes. The informal system identified where the information foremen provided was false or inaccurate.

2.3. The Effect of the IAIS

Described as a *"daily audit sheet"*, the IAIS, allowed the union to *"account for every minute of the day."* According to Binnie:

> *"We could tell at a glance exactly how the room had performed, exactly what the productivity for the day had been, the lot."*

By the time of the collapse, wastage had been reduced the extent that both cutting rooms were operating at their budgeted efficiency levels. Furthermore, according to

the IAIS, the slaughterboard was running at 83 percent productivity when the system was introduced. By the time Fortex failed, the slaughterboard was also constantly performing at 100 percent efficiency.

3. Discussion

3.1. General Research

Fortex's IAIS exhibited two characteristics prevalent in earlier research. Firstly, it was perceived to be more accurate than the formal AIS (Clancy and Collins, 1979). Secondly, it maintained information on production efficiency (Lal and Donaldson, 1988).

Modestly described by Binnie as *"simple but effective"* the IAIS which maintained information on the Seafield plant's cutting rooms and slaughterboard, was more complex than most found in previous research. Hopwood (1973) reports a scale of IAISs which ranged from regular notes to a level of complexity similar to that of a formal system. Curiously, the IAIS which operated at the Seafield plant had both features. Hand recorded notes were inputted into a computer-generated spreadsheets. Later the information was entirely maintained on a computer system and by the time the company collapsed, the size and complexity was such that the IAIS resembled part of any organisation's management accounting system. The evolution from rudimentary daily note-taking to the structured, complex system exhibited by the Seafield plant had when it closed, is not mentioned in prior research. One potential explanation could be that prior researchers observed the systems at a single point in time rather than over a period of time.

Fortex's IAIS was introduced for the dual reasons evident in Myers' (1970) research. The system benefited both the company and the employees themselves. The company's efficiency was seen as crucial for the continuing existence of the company and therefore the continuance of their employment. Furthermore, the employees were paid incentives for high production. The IAIS, which assisted efficient production, helped maximise the employees' incentive payments. Hence, in its secondary purpose, the Seafield plant's IAIS was similar to the system Lupton

(1963) found where a group of employees used an IAIS to manipulate their incentive wage scheme. However, in the present case the financial benefits were not the result of any manipulation, but represented a genuine attempt to improve the organisation's performance.

Like Lupton's (1963) research, Fortex's IAIS was operated by a group of people. However, rather than a group of employees, Fortex's IAIS relied on a collaboration between union delegates, employees, and management. This collaboration is unusual in three respects:

- Firstly, most previous research has indicated that systems are maintained by managerial employees.

- Secondly, except for Lupton's (1963) findings, IAISs were maintained by one person for use by that person.

- Thirdly, while Davis and Olson (1985) assert that IAISs may receive official sanction, managerial participation an IAIS is anomalous to previous research. Managerial participation indicates that the system was not strictly informal, but operated as an adjunct to the organisation's internal accounting mechanism. However, because the formal system also maintained production information, the IAIS cannot be adjudged an official part of the formal system. This too is unusual. Coincidentally, the only comparable findings are those of Lal and Donaldson (1988) whose research was also conducted within New Zealand organisations.

3.2. New Zealand Specific Research

Lal and Donaldson (1988) reported two cases where IAISs effectively replaced part of the formal system. As indicated above, the records maintained by the IAIS were also kept by the formal system. The IAIS also provided information not produced by the formal system.

At a glance these characteristics would indicate that the IAIS either duplicated or supplemented/complemented the formal system. However, the IAIS was self-

contained and did not rely solely on transcribing information from the formal system. Therefore, it did not duplicate the formal system. Moreover, because foremen and workers were also evaluated and managed according to the information produced by the system, it is evident that Seafield's IAIS was used for more than just to provide additional information. Instead, the IAIS effectively replaced the formal system for daily operational purposes. It is notable that systems which replace the formal accounting system have only been found in New Zealand based research.

With one exception, Lal and Donaldson (1988) found that most of the IAIS maintained were small, unstructured and infrequently used. Only one manager referred to his system frequently. Fortex's IAIS was large, structured and updated every day. Furthermore, whereas Lal and Donaldson's (1988) managers each indicated one reason why the system was maintained,[82] the dual nature of Fortex's IAIS precludes singular categorisation.

While primarily concerned with improving efficiency, the system also checked the accuracy of the formal system and helped the union and employees manage their jobs better. Furthermore, the IAIS could also be viewed as a defense mechanism in that its development meant the plant's workers did not receive a wage reduction. Each of the above factors were mentioned by Lal and Donaldson (1988) as causes for different systems.[83] However, due to its size and complexity, the IAIS fulfilled each of these roles.

The size and complexity meant the IAIS displayed many of the characteristics found in Lal and Donaldson's (1988) research. However, in combination, the characteristics also made the IAIS dissimilar to any of the individual systems mentioned in any prior research.

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[82] One manager provided two reasons.

[83] Exhibit 4.2, p 45 of this thesis, set out the causes of IAISs found by Lal and Donaldson (1988).

3.3. Summary

Seafield's IAIS was unique in many respects. Its complexity parallelled that of a formal system, it received official sanctioning and managerial participation, was maintained by more than one person and replaced information from the formal system for daily operational purposes. However, it can be established that the IAIS functioned differently from the roles the formal accounting system is purported to perform in a crisis. They were internalised and hence did not scan the external environment for crises. Furthermore, they focused on one specific area of the organisation's performance, namely production.

These findings are unsurprising as the systems identified by previous researchers also held the same characteristics. The potential limitations were acknowledged in Chapter 4.[84] However, the focus was to identify whether, as it was earlier proposed, such systems may provide information about a specific area of performance that may alert the employees to a problem which threatened the organisation. In this case the reverse may have occurred.

4. Employees and Informal Accounting Information

The employees in the lamb and venison cutting floors and slaughterboard unit were aware that the IAIS existed and that it was beneficial for both themselves and the company. One acknowledged that they were rewarded for their performance and the IAIS was a means to maximise their incentives. However, he or she reported that the *primary* purpose of the system was to maximise the company's profit.

While the interviewees recognised the benefits provided by the IAIS, no more than six had direct access to the information it contained. These six consisted of the management representative, Binnie, another union delegate, and three employees, one for each floor, who recorded cut change times. However, the employees were provided with information from the IAIS, which detailed their performance and

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[84] See Chapter 4, p 49 of this thesis for the limitations.

production problems, in the focus meetings and during other meetings which occurred in 'smoko' breaks. From this information they believed they were well informed as to their own work performance:

> *"They [the union delegates] would go over to the management and would discuss why we were stopped so long and what ever happened to the saw breakdown and did we have a power cut etcetera like that. So we were well informed. The union and the company both worked together like that."*

The information that the employees received at these meetings was not identified as one of the sources of information which the employees used to ascertain that the company was distressed. Instead it fulfilled the opposite role. The information from the IAIS contributed to the belief that the company was, and would continue to be, successful.

The employees associated their job performance with the company's performance. That is, the employees correctly perceived that by improving their own performance, they were assisting the overall the performance of the company. The information from the IAIS confirmed that the employees were gradually becoming more efficient. Therefore, the performance of the company was also expected to improve. It is here that the limited scope of the IAIS could have further affected the employees' perceptions.

Efficient production and processing was just one of three important elements (the other two being the procurement of lambs and marketing), required for Fortex to be successful (FGAR, 1990). The IAIS solely concerned processing (a facet of the organisation which seemed to be performing well), and did not have the capability to assess the organisation's overall performance. For instance, the limited scope of the IAIS provided no means to ascertain that Fortex was struggling to sell all of its production.

The employees reported that their opinions of the company's performance were reinforced by the information supplied by Fortex's management. Fortex's management would often attend the 'smoko' meetings and inform the employees of the company's success overseas, particularly its marketing achievements. Plant management were also quick to allay the concerns of those who had overheard rumours of a large stockpile. For the most part these reassurances were accepted.

Furthermore, a newsletter was produced which also informed the employees about the company's operations and invariably its successes.

4.1. Conclusion

Within Chapter 4, several propositions concerning IAISs and distress were discussed, the first of which (that employees may use information from IAIS to detect distress), has not been supported in this instance. Instead the opposite was found. The information the employees received from the IAIS showed that their own performance was excellent. When reinforced by information on the company's successes, it is unsurprising that, even in the last few months, many believed the company would not fail. However, while this proposition has been rejected, supporting evidence was found for the other potential interrelationships between IAISs and distress which were posited in Chapter 4.

5. Other Relationships Between IAIS and Distress

5.1. Indicating Company Weaknesses

Based on previous research this researcher proposed that an IAIS may be established in response to a weakness or problem which contributes to distress.

In this case the IAIS was established in response to inefficient production. The problem was severe, costing the company $2 million in annual potential earnings. Peter Binnie maintained that the inefficiencies threatened the company's survival stating "*...no company can survive like that.*" Prior distress research has found that production problems and inefficiencies could cause a company to become incompetitive and fail (Bruno et al, 1987; Lingard, 1989; Scherrer, 1988). Therefore, this case indicates that an IAIS may be developed in an attempt to remedy a problem or weakness that contributes to corporate distress or the eventual failure of a company.

5.2. Comparing the Informal and Formal AIS

The author also proposed that a comparison of informal and formal systems may detect differences in the formal systems records which could be investigated. Discrepancies could arise from fraud or creative accounting, or from an inadequate formal accounting system. These factors have been identified by Argenti (1977, 1979b) as issues contributing to a company's collapse.[85]

According to Binnie, the system *"operated as a daily audit sheet."* Information from the informal system was compared to the formal system, and therefore provided a check on the formal system's accuracy. In this case the systems produced approximately the same figures. Consequently, the comparison did not reveal any areas of creative accounting or fraud, other than the simple mistakes and time manipulations performed by the supervisors. However, consistent with the prior research of Clancy and Collins (1979), the informal system was perceived as slightly more accurate than the formal system. Hence, any differences identified were attributed to errors in the formal system.

By verifying the accuracy of the formal records, Fortex's IAIS effectively operated as an internal auditing mechanism. In companies with a weak internal audit function, such a system could be a valuable source for an external auditor seeking to verify the accuracy of a company's formal system.

5.3. Indicating Weaknesses in the Formal AIS

It was proposed that an IAIS in itself indicates a weakness within a formal accounting system, for if the formal system provided the data employees require, it is unlikely that employees would operate an informal system. Such a weakness could be a defect which is an important factor noted in the failure of many companies (Argenti, 1977, 1979b).

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[85] According to Argenti (1977, 1979b), a poor accounting function is a defect which occurs earliest in the collapse process, while creative accounting is an observable symptom of a distressed company.

The Seafield plant's IAIS was constructed after the realisation of the cutting floors inefficiencies. Prior to Binnie's letter which detailed the wastage and inefficiency, management seemed unaware of these problems. Binnie claimed that this lack of awareness was a result of an inadequate accounting system which had not identified that production was severely inefficient. Forensic accountant David Osborne of the Serious Fraud Office provided support for this claim with his post-collapse examination revealing that Fortex's formal accounting system was not very sophisticated (The Press, 1995a). Moreover, the IAIS supplanted the formal system and was used to manage and evaluate employees' performance.

However, not all the evidence indicates that the formal system was defective. The formal accounting system recorded the times for cut changes and each day's production requirements. Secondly, after the IAIS was established, a comparison between the two systems only revealed slight discrepancies.

The conflicting evidence raises two alternative scenarios relating to the period prior to the development of the IAIS:

- Firstly, that the formal AIS was defective and did not provide evidence of the severely inefficient production at the Seafield plant.
- Secondly, that the formal AIS was not defective and that management were aware that production was severely inefficient but had undertaken no means to remedy the problem.

Hence, while inconclusive, this case indicates that an IAIS could potentially be constructed in response to a defective formal accounting system, an event which could contribute to a company's demise. Therefore, the observation of an IAIS could help identify a distressed company.

6. Conclusion

In this case the employees received information from the IAIS. Instead of contributing to their concerns or perceptions that Fortex was distressed, the information reinforced the opinion that the company was performing well and would

not fail. However, that does not necessarily mean that IAISs do not have a role in a distress situation. The case indicates that IAISs can be constructed in response to weakness, in this case severely inefficient production, which could cause a company to fail and that the construction of any IAIS may indicate a defective formal accounting system which is also a determining factor in a company's failure (Argenti, 1977, 1979b).

Chapter 11

Conclusions, Limitations and Recommendations

1. Introduction

This chapter concludes this thesis. The chapter begins by providing a brief overview of the study's objectives, method and results. Then, the limitations of the research and the implications the results raise are discussed. Lastly, several ideas for future research are offered and the thesis is summarised.

2. Conclusion

This exploratory research had two objectives. The first was to establish whether employees can observe the non-financial, or indeed any signs that a company is distressed, and whether these observations contribute to an employees' perceptions of distress. The second was to examine the extent to which two sources of informal information, an IAIS and the grapevine, contributed to employees' observations of concerns and problems.

Previous distress research has apparently not utilised non-managerial employees as a source of information regarding a company's collapse. However, employees are in an ideal position to observe the symptoms of distress. A review of previous research into employees' observations revealed an anomaly between Argenti's (1976a) and McBarnet et al's (1993) findings which required clarification. An examination of grapevine and IAIS literature revealed that both systems could potentially contribute to an employee's perceptions of distress. From the literature other interrelationships between distress, an IAIS, and the grapevine were also proposed.

The research was conducted as a single case study. The subject was Fortex Group Limited, a failed South Island meat-processing company. Information was predominantly gleaned from semi-structured interviews with 15 former employees of Fortex's Seafield plant. The research revealed several findings inconsistent with the prior research and raised several areas for future examination.

2.1. Employees and Corporate Distress

Consistent with Argenti's (1976a) claim, the employees interviewed observed the non-financial symptoms of failure. In several instances their observations occurred weeks before the symptoms became public knowledge. This was just one example where, due to their inside position, the employees proved far more perceptive than they are often given credit. Their perceptiveness provided preliminary evidence which challenged and extended Argenti's (1976a) assertion that employees can only observe some of the symptoms of corporate distress:

- Firstly, the employees' observations extended to financial symptoms and other non-financial symptoms which Argenti (1976a) reported that employees were unable to observe.

- Secondly, the employees' concerns were not restricted to the period immediately prior to collapse but they also extended to include the defects which cause, and the mistakes which contribute to, failure. While these defects and mistakes were reported as concerning at the time they occurred, they were not recognised as contributing to the company's distress. Nevertheless, just by observing these events and factors and finding them concerning, the employees proved more perceptive than Argenti (1976a) would lead us to believe.

- Thirdly, 14 of the interviewees recognised that the company was distressed, an opinion which was formed based on the symptoms the company displayed. Argenti (1976a) proposed that employees could *not* identify that a company was distressed.

- Fourthly, five interviewees believed that Fortex was so distressed that it could fail.

2.2. The Grapevine

While the employees' detection of distress was undoubtedly influenced by information received from formal sources, and from direct observation, they indicated that rumour, or grapevine information, was also a valuable source of information used to assess their surroundings. The grapevine's activity increased in

the three months prior to Fortex's failure and as such, could constitute a symptom of failure. Moreover, in this period the employees reported discussing their own, and hearing other employees' and external parties', concerns via the grapevine. Many of these concerns were symptoms of the company's distress. Hence, the grapevine contributed to the employees' perception that the company was distressed.

2.3. The Informal Accounting Information System

The detailed examination of a somewhat unusual informal accounting information system added to an area of scant prior literature. The proposition that the employees may obtain information from an IAIS which contributes to their observation of factors of distress was rejected in this case. Instead, the limited volume of information the employees received from the IAIS highlighted their successes, rather than indicating problems. However, a number of other implications were raised:

- Firstly, IAIS's may be constructed in response to a problem. In this case the problem was the severely inefficient processing operations in which one third of all productive time was wasted. Such problems may contribute to a company's distress.

- Secondly, an IAIS can replace information from the formal system. Therefore, in itself, an IAIS may indicate inadequacies in a company's formal accounting system which is a defect which may lead to failure (Argenti, 1976a).

- Thirdly, information from informal and formal AIS's may be compared. These measures may be used in an internal audit role, or could be used by an external party to verify the accuracy of information from the formal system. This could be a particularly valuable practice for an external auditor.[86]

[86] The researcher is unaware if external auditors undertake such comparisons. This may be an area requiring future research.

3. Limitations

The case study method adopted in this research was critiqued in Chapter 6. Included within that chapter were the techniques undertaken to reduce any potential effect of the method's limitations. Nevertheless, any conclusions drawn from this research have to be interpreted with respect to the following limiting factors:

- Interviewer bias;
- Response error;
- Interviewee recollection difficulties;
- Hindsight bias;
- Accuracy of evidence;
- Sample constraints and selection bias; and
- Generalisability.

3.1. Interviewer Bias

Just as the presence of an interviewer can potentially alter the responses given by an individual (Emory and Cooper, 1991), simply by asking questions, a level of bias may be introduced into research. A professionally trained interviewer is unlikely to introduce as much bias as an individual who is untrained or inexperienced (Richardson, Dohrenwend and Klein, 1965). The interviews were conducted by the researcher who, while not professionally trained, has previous interview experience, including experience where the questioning technique introduced bias. Hence, aware of the ease in which bias can be introduced, as much care as practicable was taken during the interview process. However, some risk of interviewer bias remains.

3.2. Response Error

Despite any attempts by the interviewer the potential for bias (particularly response error) to occur remains. When viewed in a critical manner, the responses of several employees were identified as incorrect and were ignored. For example, one interviewee asserted that they had read a report prior to Fortex's failure. This

'report' was strikingly similar to Brett's (1994) article which was written well after the collapse. Another respondent seemed to be answering some questions in a manner which was thought to please the interviewer. Clearly having no evidence upon which to base the claims, these responses were also discarded. However, less obvious examples of response error may have gone undetected leaving only a critical interpretation of the interviewees responses as a recourse to remove error.

A component of response error occurs when interview participants forget information (Simon and Burnstein, 1985; Beed and Stimson, 1985). In this case the natural process of forgetting warrants separate examination.

3.3. Interviewee Recollection Difficulties

A considerable period of time had passed between the collapse of the company and the point when the employees were interviewed. Over a period of time, the ability of a person to recollect events accurately diminishes (Hunter, 1957). The interviewees were requested to remember information and events which occurred as early as five years prior to the collapse. The time span involved meant that employees occasionally lacked many examples to substantiate their assertions. These difficulties gave rise to statements like *"I forget. It was such a long time ago"* and *"It's really hard to try and remember way back then because a lot of things you really don't want to remember."*

Recollection difficulties were particularly apparent with respect to the grapevine, where a few employees acknowledged hearing a multitude of rumours, but were unable to provide more than one example. Fortunately, this problem was restricted to only a few individuals and only arose occasionally. Evidence was forthcoming from the other interviewees. Furthermore, if anything, such memory difficulties potentially indicate the importance of the concerns held over events such as the development of Silverstream, that they remembered with reasonable clarity up to five years later.

3.4. Hindsight Bias

Hindsight bias refers to the tendency of individuals with knowledge of an outcome, to alter the perception of an event so that their ability to predict an event ex-post is greater than their ability ex-ante (Lowe and Reckers, 1994). In hindsight the majority of the employees recognised the inevitability of Fortex's collapse, an opinion which was only held by 5 employees in the interview group prior to its failure. For instance, one employee reported the following:

> *"I would say that if 90 percent of the staff sat back now and looked at it they would say that company was definitely going down.... If I went out and tried to tell that to other staff I think I would have got laughed out. Everyone had the idea that things were going pretty good."*

Many effects of hindsight on the employees perceptions of the company were obvious. The majority of hindsight-influenced responses where phrased using the term 'in hindsight.' This information was discarded and not analysed as part of the preceding chapters. However, it is probable that other responses were not so obviously influenced. One further example could be the employees' perception of whether the company was going to fail and their reaction of surprise or otherwise, where both groups observed a nearly identical number and type of distress factors. Similarly, events may have been attributed more significance in Fortex's downfall ex-post than they were ex-ante. Such bias could account for the diversity of opinion displayed in the employees' responses.

Any overt influence of hindsight was reduced by asking when the employees noted events. Primarily, whether events were noted before or after the company's collapse. However, the effect of hindsight bias cannot be wholly negated and must not be lost sight of when interpreting the conclusions. Furthermore, hindsight bias is not solely in the domain of the interviewees' responses, but it is also applicable to the analysis performed by the researcher.

As Buchman (1985) noted bankruptcy prediction can be influenced by hindsight. The analysis the company's collapse from the employees' perspective was performed retrospectively. Therefore, the events identified in Chapter 8 which seemed to conform to those proposed in Chapter 5, Observable Factors in Corporate Distress,

are less likely to have been identified had the analysis occurred prior to failure. However, such an influence does not make the findings worthless. Furthermore, it must be remembered that the original opinions provided were the employees own, detailing those events which caused them concern. This researcher has only compared those concerns with factors proposed in prior distress research. While potentially introducing a further aspect of hindsight bias, such an interpretation and comparison does not negate the worth of the findings, and is a method used by other researchers who have retrospectively analysed a company's failure.

3.5. Accuracy of Evidence

As has already been noted hindsight bias, interviewer biases, response error and recollection difficulties are all potential limitations on the conclusions drawn from this research. The nature of the research required employees to recall information which was mostly based on their own, and others, opinions and feelings. Furthermore, the spoken nature of grapevine information means that, except for comparisons with responses from other individuals, there were few mechanisms to verify the accuracy of the responses. Such problems impinge on the accuracy of the mostly anecdotal evidence obtained through interviews.

The observation count of the concerns the employees held reveals a large disparity in observations between differing events.[87] Several events have fewer than three interviewees remarking on an event's importance. Such low observations, particularly where there was only a single observation, may indicate an event which the interviewees identified as an issue of importance influenced by the effect of hindsight, or to be incorrect information. In such a case, the other interviewees, by not mentioning such factors, would be placing the factors in the 'correct' context that they were not a concern to them.

Unfortunately, an interpretation of the events identified relatively few of the employees interviewed is not so clear-cut. For instance, the employees who did not

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[87] The reader is referred to Table 8.1: Distress Events Observed by Employees in Chronological Order, which is set out on p 152 of this thesis.

identify the concerns could have understated their observation or the level of concern the event inflicted upon them. Furthermore, it has been established that the information proffered by the individual employees differed by their physical (such as working in differing departments and/or differing shifts) and hierarchical (union vs non-union information) positions within the organisation, and whether they had access to informal grapevine information.

Moreover, other non-quantifiable characteristics, such as the perceptiveness or mind-set of the individual employees, could have influenced their opinions. For instance, the people who reportedly believed the company was troubled prior to the collapse were branded 'pessimists' by one individual. Yet it could be that these 'pessimistic' individuals were privy to more information or were more perceptive than the individual categorising them as such.

Due to this array of mitigating factors, the concerns identified by only a few interviewees were included in the analysis of the information results and discussion. All factors were critically examined to reduce the effects of any bias. However, some of the lesser mentioned concerns, such as the 1993 share issue to employees and the 1993 loss, must be viewed with suspicion. For this reason, the findings can not be conclusive but only indicative of the role informal information plays in distressed organisations.

3.6. Sample Constraints and Bias

Only 15 individuals participated in the research. One other former employee was willing to be interviewed but was unavailable when contact was attempted. This individual was a union representative and had considerable experience within Fortex. However, the union was adequately represented through two of the three delegates being interviewed.

The former Fortex employees who constituted the sample were selected by one individual, Peter Binnie. Binnie also participated as an interview candidate. While being a practical approach, whereby Binnie identified people who would be willing to participate, this procedure may have introduced a form of self-selection bias.

Furthermore, Binnie may have chosen personal friends or individuals having more knowledge of events contributing to Fortex's demise. This point is especially relevant since the union was privy to more information, both formal and informal, than other employees.

However, with the diversity of responses provided by the interviewees, (a potential limitation elsewhere), and the fact that the sample included two individuals who were obvious isolates, this would indicate that the bias introduced through Binnie's selection of participants was negligible. The responses would have been anomalous if all 14 indicated an equal knowledge of the problems which beset the company, or a knowledge approaching Binnie's when he held a privileged position.

3.7. Generalisability

The sample is small considering the size of the organisation. With the findings arising from only a small number of individuals from one plant, they cannot be empirically generalised to other divisions of the organisation or to other companies. Generalisability is further affected by the nature of the subject company. Fortex is most unlikely to be representative when compared to other company failures, and to companies in general. The media attention, prolific growth rate, and belief and hyperbole surrounding the company is uncommon. These factors and the sudden demise of the organisation would indicate a Type 2 failure trajectory, a category which only approximately 10 percent of failures exhibit (Argenti, 1976a).

However, as was noted in Chapter 6, Research Method, empirical generalisations were not the object of this exploratory research. Instead, the findings of case study research can be analytically generalised (Mitchell, 1983; Yin, 1989; Scapens, 1990). Hence, the findings of this case may well equally apply to employees of other distressed organisations.

3.8. Summary

Each of the limitations must be considered when consideration of the results of this research is made. However, despite the limiting effects, this study has raised several implications and opportunities for future research.

4. Implications

During the interviews, Binnie submitted that *"I think workers are generally far more perceptive than what the employers give them credit for being."* The research supported this claim. The findings regarding employees' observations, the grapevine and an IAIS have both practical and research oriented applications.

The employees' perceptiveness and insider knowledge means that they could prove to be a valuable source of information for a researcher seeking to examine a company's collapse. Employees may provide a perspective not provided through interviewing managers and accountants, who may focus predominantly on the financial issues which promote failure.

Employees may also provide information which could be used to assess whether an organisation is distressed before it fails. Similarly, the grapevine (if it could be accessed), and an IAIS (which provides information complementary to the formal accounting reports), may also be used by external parties to assess an organisation's viability. These external parties could include bankers, financial analysts, secured lenders, and auditors. However, apart from auditors who have the statutory right to enter a company's premises, many external parties may not have access to a company's employees. Furthermore, a third party's ability to detect distress will depend of the willingness of the employees to communicate information to them. Research needs to undertaken to establish the viability of assessing distress through obtaining information from employees. This is the first and most important recommendation for future research.

5. Recommendations for Future Research

Being exploratory and an analysis of a single case, the conclusions drawn from this research are not final. Therefore, the potential interrelationships between employees' observations, informal information and corporate distress raised and examined during this research require subsequent re-examination in the context of other failed companies. Research of this form may be undertaken in distinct parts as each individual of the components; employees observations in distress, the grapevine and IAIS's, have not been the subject of a significant level of prior research. In particular, employees' perceptions and observations require further examination.

Employees observations offer a potential source for the early detection of distress. However, such perceptions require examination in a variety of organisations. Two obvious criteria for organisations where further research should be conducted are:

- Firstly, where employees were not informed through formal channels that the company was distressed; and

- Secondly, companies that received little media attention reporting the reasons for failure. Therefore, limiting the effect of hindsight bias. This second objective may also be achieved by studying a company immediately after its failure, before excessive media coverage occurs.

By conducting further research of this form in such organisations, employees' observations, (and whether they are aware of distress before failure), may gain more support or be challenged.

The employees' observations within the company differed markedly. Numerous reasons were proposed including different physical and hierarchical positions, isolation from interpersonal communication, and personal characteristics such as individuals being optimists or pessimists. However, these reasons are unlikely to be definitive. Other factors may influence employees' observations and perceptions. An understanding of the factors and the interrelationship between factors may allow the determination of the individuals who would offer the most information for

distress detection. Furthermore, an examination and comparison of other employee groups, such as foremen or supervisors, management other than senior management, and salaried staff, may reveal that each observes different factors.[88] This examination may reveal which of these groups is (are) most likely to detect distress, therefore indicating which group(s) could provide the most fruitful information to a third party who attempts to detect distress.

The findings of this case raise implications for employees who trade shares based on their observations. If they are aware of the organisation's distress before the general public and choose to sell shares, employees in this position may breach the insider trading laws set forth in the Securities Amendment Act 1988. The legislation seems to include non-managerial employees within its scope. However, a detailed analysis of this issue was outside the scope of this research and is left for other researchers to develop.

With respect to the grapevine, an inquiry should be conducted into the relationship between morale and grapevine information in distressed companies. Morale is considered a good indicator that an organisation is distressed. This and previous research indicates that the two areas are interdependent, but research has not established how this interdependence occurs.

In this study the volume of rumour from the grapevine increased as failure approached. Therefore, in itself, grapevine activity in distressed and non-distressed organisations requires further examination. A comparison between grapevine activity in an organisation before and during distress would be ideal. However, this would require foresight to predict which organisation will become distressed, a task which is theoretically and practically difficult to perform. These examinations would provide detail on a potentially significant indicator of corporate distress.

Several employees acted as 'gatekeepers' within the company's grapevine, supplying external information to their colleagues. This role of employees has not received any

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[88] It is accepted that executive management are likely to be aware that their company is distressed. Therefore, they are not considered as a group which requires examination.

comment in prior research, and therefore research is required to determine if this finding was anomalous to Fortex or occurs in other organisation's grapevines.

This study indicated that grapevine information influenced employees' perceptions and observations of distress. However, it was impossible to establish the volume of information which originated from the grapevine as opposed to formal communication. Future researchers may attempt to delineate the proportion of information which contributes to employees' opinions. This research would be invaluable to ascertain the significance of grapevine information in distress rather than merely whether it is used or not.

In themselves, IAISs require substantially more research. As the informal counterpart of formal systems they are often viewed with contempt by the designers of the formal systems (Clancy and Collins, 1979). However, this and previous research indicates that they are not only useful, but they do not undermine the formal system. Therefore, it is surprising that more research has not been undertaken in this area to establish the legitimacy of IAISs and their usefulness for managerial decision making.

A detailed investigation into the reasons for IAIS maintenance in New Zealand companies is recommended. Both Lal and Donaldson's (1988) paper and this study have found that an IAIS may replace parts of the organisation's formal accounting system. International research has found no instances where this occurs, which may indicate that this is a New Zealand specific phenomenon.

The findings regarding the IAIS would seemingly indicate that informal information may be of worth to auditors as a source of evidence for the verification of information from the formal accounting system. As far as the author is aware, there is no previous study which has examined whether auditors use IAISs or are even aware of their potential significance.

6. Summary

Despite its limitations, this research challenged and extended previous beliefs regarding employees' observations in a distressed company, and provided preliminary links between the grapevine, IAISs and distress. Through these means this research increases the body of knowledge concerning corporate distress. Moreover, the research, by compiling, analysing and summarising literature in each of the areas examined, provides a basis from which further research can be easily undertaken.

The findings, while requiring consideration in the light of the study's limitations, potentially identified alternative sources of information to assist the early detection of distress. This was the most important of the many areas recommended for future research because the early detection of distress allows more time for a turnaround, therefore avoiding the social and fiscal effects failure has on individuals and society. However, because this research was exploratory the findings and implications require re-examination. Nevertheless, if this thesis engenders further research into the usefulness of informal information and employees' observations for the early detection of corporate distress, even if future research reaches conclusions contrary to those found in this case, its overall objective of promoting research in these areas will have been fulfilled.

Postscript

Subsequent to this study's completion, the court proceedings against Graeme Thompson, the founder and managing director, and Michael Mullen, Fortex's general manager of finance and company secretary, concluded. After initially pleading his innocence on 16 charges of fraud, Thompson was found guilty on March 7, 1996, of 12 charges regarding the false recording of loans and the signing of false annual reports (MacFie, 1996). Thompson received a six and a half year jail term (New Zealand Press Association, 1996). Earlier, Mullen admitted to seven counts of fraud and was jailed for four years (The Press, 1996).

The court proceedings revealed that creative accounting occurred as early as 1988, when loans were first entered as income (MacFie, 1996). However, the majority of the fraudulent activity occurred between May 1991 and October 1993. During this period Thompson, Mullen and several other salaried staff booked overseas loans from four banks (Indosuez, Akivbanken, Hongkong Bank and Citibank (Williams, 1996)) as income (MacFie, 1996). Moreover, Mullen authorised others to fabricate stock valuations and create false sales invoices.

The fraudulent activities undertaken resulted in a significantly improved financial position being depicted in the 1991, 1992 and 1993 financial years. If accurate accounts had been published 1991 they would have revealed that Fortex produced a loss of $4.4 million instead of a $2.8 million profit. Similarly, in 1992 a loss of $5,000 would have been incurred instead of $9.2 million profit, and 1993 would have seen a $10.4 million loss instead of a $4.8 million loss (MacFie, 1996).

The employees interviewed in this study were unaware of the fraudulent activities until after the Fortex's collapse. Nevertheless, evidence produced during the court proceedings provides support for this research.

Firstly, Thompson was reported to be charismatic, self-confident and a great leader (Williams, 1996). His fraudulent actions remained unchallenged by Mullen and the six other salaried staff who participated in classifying loans as revenue. These

attributes are consistent with an autocratic leader. Moreover, testimony from Mullen provides more evidence of Thompson's dominance stating *"...that Thompson pushed the discussion on the company's financial position to the back of the board agenda because he believed there was too much 'nit-picking'"* (MacFie, 1996, p 4). Hence, from the court proceedings, the employee's concern over Thompson's leadership style receive further justification.

Secondly, the trial again raised media attention towards Fortex's demise. Silverstream's cost (MacFie, 1996; Williams, 1996), Fortex's expansionary policies (MacFie, 1996), and intense competition and procurement wars caused by reduced lamb numbers and the snow storm (MacFie, 1996), were identified as contributing elements to Fortex's demise. The employees in this case observed each of these issues and found them concerning.

Fortex's saga may not have ended. Both Thompson and Mullen are likely to appeal their sentences, and the receiver and liquidators are presently considering whether it is feasible to undertake a civil action against Fortex's directors and executives to recover money lost by the company's creditors (Williams, 1996). Hence, even now, March 13 1996, nearly two years after Fortex was placed into receivership, the repercussions which arose from Fortex's failure continue.

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Appendix 1: Interview Questions

The questions I am about to ask you concern two areas. Firstly, is to ascertain whether you observed any concerns or problems within Fortex prior to its collapse. Secondly, is to determine from where you gained the information which led to these observations or concerns. Anything you say is strictly confidential. Your name will not be mentioned in the research. However, I do wish to record the interview so that I can remember what was said more easily. Is that a problem?

Introductory Questions

How long were you employed at Fortex?
What position did you hold?
What did your job entail?
Were you also union representative?
Prior to working at Fortex had you been employed by any other meat-working companies?
How did Fortex compare with these other companies?
Were you a shareholder?
Why did/didn't you choose to invest in Fortex?

General Questions

Q1. What was your reaction when Fortex was placed into receivership? Were you surprised?

Q2. Did you see any problems, hear rumours or have any concerns about the company's future before it collapsed?

How did you form these views?
Were they commonly held by other employees? Why?
Where did you obtain the information about these events from?
Did the number of rumours increase as the receivership got closer?
Did the content of the rumours change?

Q3. Do you believe that what you saw from inside the company was consistent with its publicly image of being successful, profitable and well-managed?

In what respect was it the same?

In what respect did it differ?

How much of your view today might be due to hindsight?

Q4. Where within the company did you get most of your information from? Were there any external sources?

For example you indicated you were concerned about ?????? where did you obtain the information from?

Q5. Some events have unfolded after the collapse such as an overvaluation of inventory and the misclassification of loans. Did you have any idea at the time?

Union Specific Questions

Q6. You indicated, in the earlier interviews, that the union kept work sheets and monitored some parts of the company. What information did you collect?

Why was that information collected?

How was it collected?

Who had access to it?

What use was made of it?

Did the company collect this information itself?

Did you have access to the official reports in these areas?

How did your figures compare to the official figures?

Q7. To what extent were you a source of information for the staff at Seafield?